Draft
Environmental Impact Report

SJW Land Company
Planned Development Rezoning

SCH# 2002062017
Volume I of IV: EIR Text

Prepared by
The City of San Jose
June 2003

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Department of Planning, Building and Code Enforcement
STEPHEN M. HAASE, AICP, DIRECTOR

June 20, 2003

Ladies and Gentlemen:

SUBJECT: DRAFT ENVIRONMENTAL IMPACT REPORT FOR SAN JOSE WATER LAND COMPANY PLANNED DEVELOPMENT REZONING (FILE NO. PDC02-046; SCH # 2002062017).

The Planning Commission of the City of San Jose will hold a Public Hearing to consider the Draft Environmental Impact Report (DEIR) prepared for the project described below. A copy of the DEIR is attached for your review.

Your comments regarding the significant environmental effects of this project and the adequacy of the DEIR are welcome. **Written comments, submitted to the Department of Planning, Building and Code Enforcement by 5:00 p.m., August 6, 2003, will be included in the Final EIR and be considered by the Planning Commission at this public hearing.** *If you make comments through a state or regional clearinghouse, please send a copy of your comments to the contact person listed below to insure prompt consideration.* If we do not receive comments (or a request for an extension of time) from you by the specified date, we will assume you have none to make.

Project Description and Location: San Jose Water Land Company Planned Development Rezoning to allow up to 325 residential units and up to 1.04 million square feet of commercial/retail uses on approximately 7.76 net acres located on both sides of Delmas Avenue, between West Santa Clara Street and West San Fernando Street. The proposed project includes the preservation and reuse of an existing 15,000 square foot City Landmark building. The proposed buildings will be constructed over structured and below-grade parking. Building heights would range from up to 218 feet above grade at the northerly end of the site rising to 268 feet above grade at the southerly end of the site with height limitation setbacks from the San Jose Water Company City Landmark buildings and from riparian corridors of Los Gatos Creek and the Guadalupe River.

Tentative Hearing Date: September 24, 2003 Council District: 3

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Sincerely,

Ron Eddow

Ron Eddow, Senior Planner

PREFACE

This document has been prepared by the City of San José as the Lead Agency, in conformance with the California Environmental Quality Act (CEQA).

This EIR provides environmental review for a Planned Development (PD) zoning to allow a mixed-use commercial and residential development on an 8.83 gross acre (7.76 net acre) site in the Diridon Station area at the western edge of downtown San José.

In accordance with CEQA, this EIR provides objective information regarding the environmental consequences of the proposed project to the decision makers who will be considering and reviewing the proposed project, and to the general public. The purpose of this EIR is to evaluate the potential impacts which might result from approval of a large mixed-use commercial and residential development at this particular location. The CEQA Guidelines contain the following general information on the role of an EIR and its contents:

> **§15121(a) Informational Document.** An EIR is an informational document which will inform public agency decision makers and the public of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. The public agency shall consider the information in the EIR, along with other information which may be presented to the agency.
>
> **§15146. Degree of Specificity.** The degree of specificity required in an EIR will correspond to the degree of specificity involved in the underlying activity which is described in the EIR.
>
> (a) An EIR on a construction project will necessarily be more detailed in the specific effects of a project than will an EIR on the adoption of a local general plan or comprehensive zoning ordinance, because the effects of the construction can be predicted with greater accuracy.
>
> (b) An EIR on a project such as the adoption or amendment of a comprehensive zoning ordinance or a local general plan should focus on the secondary effects that can be expected to follow from the adoption of the amendment, but the EIR need not be as detailed as an EIR on the specific construction projects that might follow.
>
> **§15151. Standards for Adequacy of an EIR.** An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently considers environmental consequences. An evaluation of the environmental effects of the proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection, but for adequacy, completeness, and a good-faith effort at full disclosure.

All documents referenced in this EIR are available for public review in the office of the Department of Planning, Building, and Code Enforcement, 801 North First Street, Room 400, San Jose, California, on weekdays during normal business hours.

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SUMMARY DESCRIPTION OF THE PROPOSED PROJECT

The 8.83 gross-acre acre project site is located in the Diridon Station area at the western edge of downtown San Jose. The project site is located adjacent to one of the proposed BART alternative routes through the downtown, and is adjacent to the future Vasona Corridor Light Rail Transit (LRT) line. The site is bound by West Santa Clara Street to the north, West San Fernando Street and a planned Santa Clara Valley Transportation Authority (VTA) light rail transit station to the south, and the riparian channels of Los Gatos Creek and the Guadalupe River to the west and east, respectively.

The project proposes to rezone the entire site from CN – Commercial Neighborhood, HI – Heavy Industrial, and LI – Light Industrial to A(PD) Planned Development District (File No. PDC 02-046), to allow a mixed-use commercial and residential development on the project site. The project proposes the phased development of up to 1.025 million square feet (including the existing 15,000 square foot San José Water Company building) of commercial and retail uses (with up to 50,000 square feet of retail uses) east of Delmas Avenue and up to 325 residential units with 5,000 to 15,000 square feet of ground floor commercial and retail uses west of Delmas Avenue, subject to specified Land Use Development Standards. All of the proposed uses will be over, and at the exterior edge of, structured and below-grade parking.

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATIONS

The following summarizes the primary impacts of the project. The reader is referred to the main body of the EIR for discussions of the environmental setting, impacts, and mitigation measures. Alternatives to the project are discussed in Section IV of this EIR.

ENVIRONMENTAL IMPACTS	MITIGATION MEASURES
	Land Use
The proposed project would result in a net increase of commercial parking spaces on the site, some or all of which could elect to make available for HP Pavilion patron parking. Even without the project site spaces, there are sufficient parking spaces available for the City to meets its contractual obligations to provide HP Pavilion patron parking. The project would not result in any land use impacts related to a loss of HP Pavilion patron parking. **(Less than Significant Impact)**	No mitigation proposed or required. **(Less than Significant Impact)**

Land Use, cont.

Mitigation included in the project will ensure that the project does not result in significant land use impacts related to the site's proximity to the airport, or from the former industrial uses on the site. The potential BART alignment crossing the site will not result in a significant land use impact. **(Less than Significant Impact)**	Prior to issuance of building permits for development, the property owner(s) shall grant an avigation easement to the City of San José. The easement would specify the elevation limits of development on the site and provide for acceptance of aircraft noise impacts. Mitigation for air quality, noise, hazardous materials, and visual impacts which would further reduce land use impacts to a less than significant level are discussed in Section II, F, ***Air Quality***, Section II, G, ***Noise***, and Section II, I, ***Hazardous Materials***, and Section II, J, ***Aesthetics and Shading*** of this EIR. **(Less than Significant Impact)**

Geology Impacts

Construction of buildings on and within the moderately expansive and compressible subsurface soils could result in structural damage due to expansion/contraction cycles and settlements. Below-grade parking structures will be subject to water filtration and hydrostatic pressure. Soils are also corrosive **(Significant Impact)**	Buildings and subsurface garages will be designed and constructed in accordance with the design-level geotechnical investigation prepared for the site, of which identifies the specific design features including site preparation, compaction, trench excavations, foundation and subgrade design, drainage, and pavement design. The geotechnical investigation shall be reviewed and approved by the City Public Works Department prior to issuance of a building permit for the project. A corrosion specialist will advise the project designer and engineer on alternate materials, pipe coatings, etc. to account for the corrosive soil environment. **(Less than Significant Impact with Mitigation)**
The proposed basement excavations will require lowering of groundwater levels and excessive groundwater drawdown could affect nearby structures and improvements due to settlement produced by groundwater drawdown. It is possible that groundwater pumped as a part of the dewatering could contain hazardous materials. **(Significant Impact)**	Groundwater levels across the site will be lowered prior to basement excavation and foundation construction, per the recommendations of the geotechnical investigation. Prior characterization, discharge approval and permits, and a health and safety plan will be required if contaminated groundwater will be pumped during dewatering. . **(Less than Significant Impact with Mitigation)**

Geology Impacts, cont.

The proposed basement excavations, if not property shored, could lead to undesirable ground movements, potentially affecting nearby structures, utilities and surface improvements. The proposed walls of the excavation could also slump or collapse. **(Significant Impact)**	To prevent slope failure during basement construction, the walls of the basement excavations would be supported by a suitable shoring systems. The proposed shoring system will be designed in conformance with the recommendations of the geotechnical investigation. **(Less than Significant Impact with Mitigation)**
Development along the east and west sides of the site (adjacent to creek channels) would be susceptible to seismically-induced liquefaction and liquefaction-induced lateral spreading. **(Significant Impact)**	Mitigation measures to reduce the potential influence of lateral spreading include: supporting the structures on piles or a mat foundation; setting the buildings back from the banks of the creeks at least 50 feet; buttressing the creek banks with structures and/or fills); and reducing the susceptibility to liquefaction of soils within and below the creek banks by ground improvement techniques such as vibroflotation or grouting. **(Less than Significant Impact with Mitigation)**
Potential seismic impacts would be reduced to a less than significant level by the use of standard engineering techniques mandated by the Uniform Building Code. Therefore, the project would not result in significant seismic impacts. **(Less than Significant Impact)**	Seismic hazards to the project will be mitigated by the project utilizing design and construction practices in accordance with Seismic Zone 4 building criteria, as described in the Uniform Building Code, that allows structures to resist minor earthquakes without damage and major earthquakes without collapse. **(Less than Significant Impact with Mitigation)**

Drainage and Water Quality

Until completion of the Guadalupe River flood control project (scheduled for December 2004) the northern portion of the project site is designated as 100-year flood zone of the Guadalupe River. The site is also subject to minor flooding from a commingling of flood waters from the Guadalupe River and Los Gatos Creek The project proposes to construct townhouses fronting Los Gatos Creek with finished floor elevations one foot above the 100-year flood elevation. Therefore, the project will conform to the requirements of San José's Flood Hazard Ordinance and the proposed buildings would not be subject to flood impacts. **(Less than Significant Impact)**	No mitigation required or proposed. **(Less than Significant Impact with Mitigation)**
Future development on the site would result in a net decrease in stormwater runoff from the site and would not impact the stormwater collection system within the project area. **(Less than Significant Impact)**	The project applicant would comply with the City of San José's NPDES permit and the State Water Resource Control Board (SWRCB) General Construction Activities Permit as follows: the project applicant will develop, implement, and maintain a Stormwater Pollution Prevention Plan (SWPPP) that addresses Best Management Practices (BMPs) to be included in the project for both the construction and post construction periods; and file a Notice of Intent (NOI) with the State Water Resources Control Board (SWRCB) 30 days prior to any construction on the site **(Less than Significant Impact with Mitigation)**
The proposed PD rezoning would result in redevelopment that complies with current NPDES requirements, and reduces non-point source pollution. **(Less than Significant Impact)**	The project would implement construction and post-construction Best Management Practices (BMPs) to reduce water quality impacts during construction and during the operation of the site. **(Less than Significant Impact with Mitigation)**

Biological Resources

Implementation of the project would have a less than significant impact on species that occur within the existing developed habitat. **(Less Than Significant Impact)**	No mitigation required or proposed. **(Less Than Significant Impact)**

Biological Resources, cont.

Operation of the proposed project would not significantly impact the riparian corridors with inclusion of the proposed minimum 50-foot riparian setback. Only buildings and landscape areas shall front the riparian setback areas; entrance roads and parking lots shall not be constructed adjacent to the setback zones; the exception would be for emergency vehicle access and/or access for maintenance vehicle use, both of which would not require regular use by vehicles. Pedestrian walkways shall be allowed within the proposed setbacks for both streams; walkways will be no closer than 10 feet from the top of bank or edge of the drip line or riparian vegetation and will be designed and constructed in a manner that minimizes the creation of impervious surfaces. The 10-foot setback shall be densely planted with locally native tress and shrubs **(Less Than Significant Impact)**	No mitigation required or proposed. **(Less Than Significant Impact)**
If breeding raptors are present, demolition and construction activities during the nesting season may result in the disturbance or destruction of nearby breeding raptors or their nests. **(Significant Impact)**	Preconstruction surveys for nesting raptors will be conducted to ensure that no raptor nests will be disturbed during demolition and construction. If an active raptor nest is found close enough to be disturbed, a construction-free buffer zone will be established around the nest. **(Less than Significant Impact with Mitigation)**

Traffic

Project-generated traffic will cause the intersection of Bird Avenue/San Carlos Street to degrade to LOS E or worse during the PM peak hour. **(Significant Impact)**	The project will add a second northbound left-turn lane to the intersection, which will satisfactorily mitigate the project's impact on intersection level of service. [1] **(Less than Significant Impact with Mitigation)**

[1] The mitigation measures and project-included traffic improvements discussed above [i.e., widening Delmas between San Fernando and Park to provide two southbound lanes, adding a second northbound left-turn lane at Bird/San Carlos, signalizing the Delmas/Santa Clara intersection, and intersection improvements at Delmas/San Fernando (and others described in Section II, E, of this EIR)] are necessary to mitigate impacts only once the east of Delmas commercial development is constructed. Refer to Section II, E, *Transportation,* for more information.

Traffic, cont.

Project-generated traffic will cause the local intersection of Delmas Avenue/SB SR 87 Off-Ramp and Park Avenue to degrade to LOS E or worse during the PM peak hour. **(Significant Impact)**	The project will widen Delmas Avenue between San Fernando and Park to provide two southbound lanes, which will satisfactorily mitigate the project's impact.. This widening will require acquisition of a two-foot wide section of right-of-way from three properties, or the removal of up to seven (7) on-street parking spaces (or restrictions on parking during the PM peak period). With this mitigation measure, the intersection will operate at acceptable levels of service. As a part of this improvement, the **(Less than Significant Impact with Mitigation)**
The project will have a greater than 1% impact on five mixed-flow freeway segments currently operating at LOS F. **(Significant Impact)**	Mitigation of significant project impacts on I-280 and SR 87 freeway segments will require roadway widening to construct additional through lanes. It is not feasible for individual development projects to be responsible for implementing such extensive transportation system improvements. **(Significant Unavoidable Impact)**
Construction impacts will be temporary and are not anticipated to substantially disrupt peak hour traffic. **(Less than Significant Impact)**	No mitigation required or proposed. **(Less Than Significant Impact)**
Development of the project, as proposed will contribute to improved access for both bicyclists and pedestrians in the project area. No significant adverse impacts to either bicycle or pedestrian facilities will result from the project. **(Less than Significant Impact)**	No mitigation required or proposed. **(Less Than Significant Impact)**
The project is well served by existing and future transit routes. The project will result in an incremental increase in demand for transit service. **(Less than Significant Impact)**	No mitigation required or proposed. **(Less Than Significant Impact)**

Traffic, cont.

The project will result in a net increase in commercial parking on-site and will provide sufficient parking to meet the needs of the proposed uses. **(Less than Significant Impact)**	No mitigation required or proposed. **(Less Than Significant Impact)**

Air Quality

Construction activities related to the proposed project would result in significant short-term air quality impacts. **(Significant Impact)**	The project would include the BAAQMD list of feasible construction dust control measures that can reduce construction impacts to a level that is less than significant. **(Less than Significant Impact with Mitigation)**
Vehicular emissions generated by project traffic would increase localized carbon monoxide concentrations at intersections in the vicinity of the project; however, project traffic would not cause any new violations of the 1-hour or 8-hour standards for carbon monoxide, nor contribute substantially to an existing or projected violation. **(Less than Significant Impact)**	No mitigation required or proposed. **(Less Than Significant Impact)**
Project-generated vehicle emissions of regional pollutants will exceed BAAQMD thresholds and would, therefore, have a significant impact on regional air quality. **(Significant Impact)**	The proposed trip reduction measures have the potential to reduce the regional impacts by perhaps 10-15%. Since reductions of almost 50% are required to reduce regional emissions below the BAAQMD significance threshold, the project would result in a significant unavoidable impact on regional ozone and PM_{10} air quality. **(Significant Unavoidable Regional Air Quality Impact)**

Noise

The proposed residential land use within the 65 dB CNEL contour would not be compatible with State of California (Title 24), City of San Jose and Santa Clara County Airport Land Use Commission policies. **(Significant impact)**	Prior to issuance of buildings permits for development, the property owner(s) shall grant an avigation easement to the City of San José providing for acceptance of aircraft noise impacts. Noise control treatments necessary to achieve an interior noise environment of DNL 45 dBA shall be incorporated into the proposed structures located within the 65 CNEL contour. **(Less than Significant Impact with Mitigation)**

Noise, cont.

Proposed residential uses on the site would be exposed to noise levels exceeding 60 DNL, which exceeds the threshold for multi-family housing in Title 24, Part 2, State Building Code and General Plan noise and land use compatibility standards for residential land uses. The upper stories of the proposed commercial buildings will be exposed to noise levels above the "satisfactory" limit of 76 DNL for commercial uses. **(Significant Impact)**	Prior to the approval of PD Permits to construct the project, a qualified acoustical engineer will be retained to prepare a detailed analysis of interior noise exposure. Construction techniques such as mechanical ventilation, sound-rated windows, etc. will adequately reduce interior noise levels to 45 dBA DNL or lower **(Less than Significant Impact with Mitigation)**
Project-generated traffic would not result in perceptible noise level increases. Mechanical equipment noise, parking lot noise, and other on-site noise sources would not substantially increase the existing noise levels at any existing sensitive receptor. **(Less than Significant Impact)**	No mitigation required or proposed. **(Less than Significant Impact)**
Construction of the proposed project, including pile driving, could result in significant temporary noise impacts to existing and future residences adjacent to the construction areas. **(Significant Impact)**	The project includes measures to reduce construction noise, including the following: noise-generating construction activity shall be restricted to between the hours of 7:00 AM to 7:00 PM, Monday through Friday; no construction activities will occur on weekends or holidays; a perimeter solid plywood construction barrier, 8 feet high, will be constructed to shield residential land uses from construction noise; multiple-pile drivers will be used to expedite this phase of construction. The measures will reduce the construction noise impacts, but the phased construction and pile driving could expose existing and future noise sensitive land uses to high noise levels for several years. **(Significant Unavoidable Temporary Impact)**

Noise, cont.

Project construction could generate vibration levels that may exceed structural vibration limits for the adjacent San José Water building. **(Significant Impact)**	Vibration monitoring and building surveys should be undertaken prior to, during, and after project construction to document conditions and provide appropriate level of protection for the San Jose Water office building. If damage is detected during construction, all construction will be stopped until appropriate protective measures (e.g., shoring, bracing, etc) are implemented to avoid further building damage. The following measures will be implemented during pile driving: activity shall be restricted to between the hours of 7:00 AM to 7:00 PM, Monday through Friday, with no pile driving on weekends or holidays; land uses located within 200 feet of pile-driving activities will be notified of the construction schedule in writing; and the contractor shall pre-drill pile holes to minimize the number of blows required to seat the pile for all piles driven within 200 feet of sensitive land uses. **(Less than Significant Impact with Mitigation)**

Cultural Resources

There is a moderate to high potential that grading and excavation for the project could uncover prehistoric or historic archaeological resources. **(Significant Impact)**	A qualified archaeologist will monitor subsurface construction activities within 500 feet of Los Gatos Creek (monitoring is not required along the Guadalupe River). If buried archaeological resources are discovered during construction or excavation, work within 50 feet of the find would be halted, and a qualified archaeologist will evaluate the significance of any such discovery and make recommendations. **(Less than Significant Impact with Mitigation)**

Cultural Resources, cont.

The project would retain in place, or move and rehabilitate the 1913 transformer house, a significant feature contributing to the main office building. If necessary, the project would move the transformer house within an area behind or to the side of the main office building that would retain the association between the main office building and the transformer house, and rehabilitate it according to the Secretary of Interior's Standards. New construction in the vicinity of the building will be compatible with its historic character **(Less than Significant Impact)**	No mitigation required or proposed. **(Less than Significant Impact)**
The proposed project includes design guidelines that would avoid a significant impact to the historic integrity of the San José Water Company Building. **(Less than Significant Impact)**	No mitigation required or proposed. **(Less than Significant Impact)**
The house at 45 Delmas Avenue, which has been determined not eligible for the National Register of Historic Places or the California Register, or as a Candidate City Landmark in the City of San José Historic Resources Inventory. Since the house at 45 Delmas Avenue does not meet any of these criteria, it is not considered a significant CEQA resource. Under the proposed project, the house at 45 Delmas Avenue will be offered with relocation assistance equal to the cost of demolition to anyone who will move it to a new site. If no one offers to move the house, it will be demolished following salvage operations. **(Less than Significant Impact)**	No mitigation required or proposed. **(Less than Significant Impact)**

Hazardous Materials

Development of the proposed project could result in demolition of buildings containing ACMs and lead-based paint. **(Significant Impact)**	Demolition will be done in conformance with Federal and State laws and regulations to avoid exposure of construction workers and/or the public to lead-based paint and asbestos. **(Less than Significant Impact with Mitigation)**

Hazardous Materials, cont.

Development of the site could expose construction workers, the general public, future users and residents of the site, as well as occupants of nearby properties, to soils, dust, and/or ground water contaminated by fuels, oils, solvents, and metals. **(Significant Impact)**	Prior to excavation of site soils for the subsurface garage, additional shallow soil characterization shall be performed and a soil management plan shall be completed. Excavation for the proposed subsurface parking garage will require a dewatering plan that includes analysis and proper treatment and disposal of the ground water. **(Less than Significant Impact with Mitigation)**
Development of the site could result in the destruction or contamination of unknown water production wells. The project proposes abandonment of one groundwater monitoring well. If not property abandoned, they could result in potential risks to future construction on the site. **(Potentially Significant Impact)**	Any wells proposed to be abandoned as a part of the project shall be properly abandoned in accordance with applicable regulations of the Santa Clara Valley Water District. Possible destruction and/or contamination of these wells through accidental discovery would not result in a significant environmental impact, as long as they are subsequently abandoned in accordance with SCVWD requirements. **(Less than Significant Impact with Mitigation)**
Pole-mounted transformers on-site may contain polychlorinated biphenyls (PCBs), a hazardous substance. No leaks from the transformers were observed. **(Significant Impact)**	The transformers will be tested prior to removal and disposed of in accordance with OSHA and EPA standards. All demolition activities would be undertaken according to OSHA, and EPA standards to protect workers, and offsite occupants from exposure to transformer oil and mercury contained in on-site transformers. **(Less than Significant Impact with Mitigation)**
Off-site contamination sources are not expected to adversely affect future development on the site. **(Less Than Significant Impact)**	No mitigation required or proposed. **(Less than Significant Impact)**

Aesthetics and Shading

The proposed buildings are substantially larger than existing development on the west side of Highway 87 will block views of the Santa Cruz Mountains and represent a significant change in the visual character of the area. This visual change could result in a significant visual impact, if the buildings are not properly designed in conformance with the City's design guidelines. **(Significant Impact)**	Specific structures proposed in the future will be reviewed by City staff for conformance with the standard established by the PD Rezoning. Future development proposed under the PD Zoning will conform to the City's adopted Residential and Commercial Design Guidelines. While there is no way to avoid the visual change that will result from implementation of the project, conformance with the Residential and Commercial Design Guidelines will ensure that the proposed development will not substantially degrade the existing visual character or quality of the site and its surroundings. **(Less than Significant Impact with Mitigation)**
The proposed office buildings may result in light spillover onto adjacent properties and increase reflected glare, but the distance is sufficient between the buildings and the closest residence to avoid significant impacts from light spillover. **(Less than Significant Impact)**	Future development on the site will use low-pressure sodium lighting for outdoor uses, in compliance with City Council Policy 4-3, which would reduce the potential for night-time glare. Future development will be subject to design review by the Planning staff, which would ensure that external building materials are used that minimize reflected glare. **(Less than Significant Impact)**
Buildout of the proposed maximum building envelope and illustrative site plan would result in more than ten percent of the Arena Green and Guadalupe River Park trail east of the site to be shaded during the midday hours around the winter solstice, which is considered a significant shading impact. **(Significant Impact)**	Without defining a size restriction on a future project design (which may be inconsistent with City goals and policies calling for dense, in-fill development at the project site), there are no measures that could be incorporated into the project that would allow buildout of the proposed maximum building envelope and would avoid the significant shading impact. **(Significant Unavoidable Impact)**

Utility and Service Systems

Implementation of the proposed project is not expected to exceed the capacity of electricity, gas, and telephone service providers. **(Less Than Significant Impact)**	No mitigation required or proposed. **(Less than Significant Impact)**

Utilities and Services, cont.

Development of the proposed project will not use water in a wasteful manner or result substantial impacts related to increases in water demand. Any active on-site wells displaced by the proposed project will be replaced and the project will not result in any impacts to SJWC's ability to provide sufficient water supply to the downtown San José service area. **(Less than Significant Impact)**	No mitigation required or proposed. **(Less than Significant Impact)**
Development of the project would not adversely affect the water service system. **(Less than Significant Impact)**	No mitigation required or proposed. **(Less than Significant Impact)**
Development of the proposed project will result in a reduction in storm water runoff when compared to the existing condition. **(Beneficial Impact)**	No mitigation required or proposed. **(Less than Significant Impact)**
Development of the proposed project is not be expected to result in a significant impact upon the existing sanitary sewer services provided by the City of San José. **(Less Than Significant Impact)**	No mitigation required or proposed. **(Less than Significant Impact)**
Development of the proposed project will result in an incremental increase in solid waste and recyclables collected under the City contracts. This increase would not exceed either the capacity of the collection systems or the secured landfill capacity. **(Less Than Significant Impact)**	No mitigation required or proposed. **(Less than Significant Impact)**

Energy

Development of the proposed project will increase energy use, but will not cause excessively wasteful or inefficient use of energy. **(Less Than Significant Impact)**	No mitigation required or proposed. **(Less than Significant Impact)**

Public Services

Development of the project would not create the need for any new fire or police facilities. Nor would it require the construction of new school, libraries, or parks. **(Less than Significant Impact)**	No mitigation required or proposed. **(Less than Significant Impact)**

Cumulative Impacts

Traffic from the project and other pending development in central San José will cause the following six City of San Jose intersections to operate at an unacceptable level (LOS E or worse) under cumulative conditions: SR 87 and Julian Street (E); I-280 and Bird Avenue (N); Almaden Boulevard and San Carlos Street; Bird Avenue and San Carlos Street; Market Street and San Carlos Street; and Delmas Avenue/SB SR 87 Off-Ramp and Park Avenue. **(Significant Cumulative Impact)**.	It should be acknowledged that the cumulative traffic impacts discussion does not take into account several major transit improvement projects that will be adjacent to the site, including LRT, Caltrain, and BART service improvements. Mitigation measures for the affected intersections are identified in Section III of the EIR. Since there is no mechanism in place to achieve mitigation of all identified cumulative traffic impacts, this would be a significant unavoidable cumulative impact. **(Significant Unavoidable Cumulative Impact)**.
The project will contribute to regional emissions that exceed the significance thresholds for reactive organic gases, nitrogen oxides, and PM-10. Cumulative impacts from the project with other anticipated development in the downtown area would result in significant regional impacts in the San Francisco Bay region. **(Significant Cumulative Impact)**.	The proposed project is consistent with the general policy direction of the Clean Air Plan, in that it proposes high density residential and commercial uses at an infill location adjacent to transit. To the extent that development of the project reduces the need for longer commutes both in and out of the County, it will ultimately contribute to an improvement in regional air quality. Near term cumulative air quality impacts, however, will remain a significant unavoidable impact. **(Significant Unavoidable Cumulative Impact)**.
The cumulative impact of pending development will result in significant increases in traffic and traffic-related noise on public streets and operational noises in the area of the proposed project. **(Significant Cumulative Impact**	Since the cumulative noise impact is directly related to the increase in overall traffic volumes, there is no way to reduce the noise impact, without reducing overall traffic volumes from the cumulative development. Since there is no mechanism in place to reduce overall traffic volumes, the cumulative noise impact is also significant and unavoidable. **(Significant Unavoidable Cumulative Impact)**

Cumulative Impacts, cont.

Given that there are several large development projects approved and pending in the downtown area (CIM, the proposed project, and the Downtown Mixed Use Project), it is likely that more than one large development project may be under construction at the same time over the next few years. The cumulative construction noise of these projects will be an ongoing annoyance to residents and other sensitive noise receptors in the downtown area. **(Significant Cumulative Impact)**.	Each of the projects that comprise the cumulative development scenario will be required to implement mitigation measures to reduce their construction noise. While these measures may be sufficient to reduce the construction noise impact of an individual project, the cumulative construction noise of these projects may be an ongoing annoyance to residents and other sensitive noise receptors in the downtown area for several years, particularly if multiple projects are under construction at the same time. For this reason, the cumulative construction noise impact is considered significant and unavoidable. **(Significant Unavoidable Cumulative Impact)**.

Summary of Alternatives

CEQA requires that an EIR identify alternatives to the project as proposed. The CEQA Guidelines specify that an EIR identify alternatives which "would feasibly attain the most basic objectives of the project but avoid or substantially lessen many of the significant environmental effects of the project".

A. NO PROJECT ALTERNATIVE

Under a No Project alternative, the project site would be remain as the San Jose Water Company headquarters, surface parking lots, and one residence. This alternative would completely avoid all of the identified impacts anticipated to occur as a result of the project. The No Project Alternative would not meet any of the project objectives. The No Project Alternative would also not have the positive benefits anticipated to result from the project. The No Project alternative would not provide the economic benefits to the City resulting from development of the site and the generation of 3,000 jobs in a jobs-poor City. The No Project alternative does not encourage transit use by developing an infill site which is adjacent to a future LRT station and is within walking distance of a Caltrain and Amtrak depot, and future BART. The No Project Alternative would not encourage pedestrian traffic along the Guadalupe and Los Gatos Creeks by providing landscaped pathways along these creek corridors.

B. REDUCED DENSITY ALTERNATIVE

A design alternative to the project as presently proposed would be a smaller scale commercial and residential development, representing a less intense use of the site. The proposed project size would have to be reduced by 74%, in order to avoid all of the project's traffic impacts. This results in a reduced project of 249,500 square feet (sf) of office use, 17,000 sf of retail use, and 85 dwelling units. The Reduced Density Alternative would avoid the project's significant unavoidable shading impact. The Reduced Density Alternative would also have a shorter construction period and would

not involve pile driving; therefore, the construction noise impacts would be reduced to a less than significant level.

The Reduced Density Alternative is the environmentally superior alternative. The Reduced Density Alternative would avoid the significant unavoidable impacts of the project, while providing some of the benefits of the project. This alternative would not take advantage of the site's proximity to transit by providing a high density commercial and residential development on a site that is adjacent to existing and future transit, including the Diridon transit hub. The Reduced Density Alternative would provide for approximately 800 jobs on the site, which is about one-quarter the jobs accommodated by the proposed project. The beneficial economic effects of improving the City's jobs/housing imbalance would be reduced proportionately with the reduction in development size. For these reasons, the Reduced Density Alternative does not, to the extent of the project, meet many of the City's General Plan goals regarding encouraging economic development and high density uses proximate to transit stations.

C. ALTERNATIVE SITE

An alternative site was considered that is located approximately 3,300 feet northeast of the project site, east of SR 87, south of the Union Pacific Railroad line, north of West St. James Street and west of Market Street. This 15.5-acre site is located partially in San Jose's Downtown Core Area and partially in the Downtown Frame Area.

Development of the project at the Alternative Site could avoid the project's two intersection impacts. It is possible that development of the proposed uses at the alternative location would result in other intersection impacts, such as the intersection of Julian Street and SR 87. The Alternative Site would not avoid the project's significant unavoidable impact upon five freeway segments, because the proposed development at this location would likely use the same freeway segments of SR87 and I-280. The Alternative Site would also not reduce or avoid the project's significant unavoidable impact upon regional air quality. Building heights of up to 180 feet on the Alternative Site would result in significant unavoidable shading impacts on future residential properties and on proposed public open space. The Alternative Site would not meet project objectives of encouraging transit use through the development of high density uses at a location adjacent to existing and future transit stations. The Alternative Site is not environmentally preferable to the project.

KNOWN VIEWS OF LOCAL GROUPS AND AREAS OF CONTROVERSY

Known areas of controversy related to the proposed project include the large scale of the project buildings, in relation to existing development to the south, and the potential loss of parking proximate to the Arena. The proposed widening of Delmas Avenue between San Fernando and Park to provide two southbound lanes will require either acquisition of a two feet wide section of right-of-way from two privately owned parcels and a parcel owned by Santa Clara County, or up to seven (7) on-street parking spaces may need to be eliminated. Alternatively, a parking restriction could be implemented during the PM peak hours only. While the potential loss of on-street parking will not result in a significant environmental impact, because other on-street parking is available and the adjacent residential uses all have off-street parking facilities (driveways and/or garages), it is a known area of controversy.

I. DESCRIPTION OF THE PROJECT

A. OVERVIEW OF THE PROJECT

The project proposes a mixed-use commercial and residential development on an 8.83 gross acre (7.76 net acres) site at the western edge of downtown San José (refer to Figure 1).[1] The project site is currently designated as *General Commercial* and *Residential Support for the Core (25+ du/acre)* in the San José 2020 General Plan, and is zoned *CN-Commercial Neighborhood, LI-Light Industrial,* and *HI-Heavy Industrial*. The applicant, San José Water (hereafter SJW) Land Company, proposes to rezone the site to allow the phased development of approximately one million square feet of commercial and retail uses, up to 325 residential units, and structured parking on the site, at an average floor area ratio (FAR) of 4.27. The proposed uses are compatible with the General Plan designations on the site and will require rezoning of the site.

B. PROJECT LOCATION

The 8.83 gross-acre acre project site is located in the Diridon Station area at the western edge of downtown San Jose. The project site is located within what is considered the "Frame" area of the Downtown Core.[2] The project site is located adjacent to one of the proposed BART alternative routes through the downtown, and is adjacent to the Vasona Corridor Light Rail Transit (LRT) line that is currently under construction. The site is bound by West Santa Clara Street to the north, West San Fernando Street and a planned Santa Clara Valley Transportation Authority (VTA) LRT station to the south, and the riparian channels of Los Gatos Creek and the Guadalupe River to the west and east, respectively. The project site is currently developed with the San José Water Company headquarters facility and a single-family residence, and the remainder of the 8.83-gross acre site is paved parking lots, and includes Delmas Avenue, a public street. Delmas Avenue bisects the project site from north to south. A regional and vicinity map of the project site is shown on Figures 1 and 2, respectively.

C. DESCRIPTION OF THE PROJECT

The project proposes to rezone the entire site from CN, LI and HI (Commercial Neighborhood, Light Industrial, and Heavy Industrial, respectively) to A(PD) Planned Development District (File No. PDC02-046), to allow a mixed-use commercial and residential development on the project site. A land use plan for the project is shown on Figure 3. The project proposes the phased development of up to 1.025 million square feet (including the existing 15,000 square foot San José Water Company building) of commercial and retail uses east of Delmas Avenue (with up to 50,000 square feet of retail uses) (Site A on Figure 3), and up to 325 residential units with up to 5,000 to 15,000 square feet

[1] The gross acreage for the proposed project is 8.83 acres, including Delmas Avenue; the net acreage (without Delmas Avenue) is 7.76 acres.

[2] The Downtown Core area is bounded by Julian Street to the north, 4th Street to the east, I-280 to the south, and SR 87 to the west. The Frame area is generally bounded by Taylor Street to the north, 11th Street to the east, Keyes/Willow Street to the south, and the Southern Pacific Railroad tracks/The Alameda to the west. (San José 2020 General Plan)

of ground floor commercial and retail uses[3] west of Delmas Avenue (Site B on Figure 3), subject to specified Land Use Development Standards that are included as part of the project and are described in Appendix B. The project, therefore, proposes a total of up to 1.025 million square feet of new commercial development on the site, and 1.04 million square feet of overall commercial development (including the existing 15,000 square foot San José Water Company building). Retail uses will be over the below-grade parking and/or at the exterior edge of the structured parking. Townhouses also may be located at the exterior edge of structured parking. All of the uses will be above the structured parking.

The project proposes to construct townhouses fronting Los Gatos Creek with finished floor elevations one foot above the 100-year flood elevation. Therefore, the project will conform to the requirements of San José's Flood Hazard Ordinance and the proposed buildings will not be subject to flood impacts.

The project proposes a mixture of above ground and underground parking to serve the development. The PD zoning proposes up to two levels of below-grade parking across the portion of the site on the east side of Delmas Avenue and one level of below-grade parking over the portion of the site on the west side of Delmas Avenue. The basement excavations east of Delmas Avenue are expected to extend 23 to 28 feet below the ground surface. West of Delmas Avenue, the basement excavations are expected to extend 12 to 15 feet below the ground surface. While it is not specifically proposed at this time, the two garages may be connected below grade.

The project proposes that parking for the proposed commercial and retail uses east of Delmas Avenue be provided in structured garages with up to two levels below grade and up to five levels above grade. The exact number of spaces to be provided will be determined at the PD Permit stage, and will be provided within a range of 2.25 to 3.00 spaces per 1,000 square feet of commercial space (i.e., between about 2,305 and 3,075 spaces if full buildout of 1.025 million square feet is constructed). The parking ratio maybe reduced by 10% (i.e., to 2.025 to 2.70 spaces per 1,000 square feet, or approximately 2,075 to 2,770 spaces at full buildout) based on the proximity to the planned LRT station. Up to 10% of the parking requirement may be valet. Access to the parking will be on Delmas Avenue. The project proposes two intersections on Delmas Avenue between West Santa Clara Street and West San Fernando Street – one four-way signalized, and one right-in/right-out only to the east of Delmas site. The project does not define the precise dimensions or locations of these driveways on Delmas Avenue; these would be determined at the PD Permit stage of project development.

The project also proposes unsignalized access on San Fernando Street just east of the planned Vasona LRT crossing (approximately 250 feet east of Delmas Avenue). This driveway may provide access to some or all of the parking east of Delmas Avenue or it may be limited to service vehicles. Turn movements permitted at this driveway may include one or more of the following: right in, right out, and left out. The use of this driveway and permitted movements will be determined at the PD permit stage. The traffic analysis (Appendix E of this EIR) includes analyses of multiple scenarios reflecting the range of potential driveway uses and turn movements.

[3] Pursuant to the *Residential Support for the Core* General Plan designation, portions of the commercial space could be located on the second floor or ground floor.

The project proposes approximately 570 parking spaces for the residential uses west of Delmas Avenue, to be provided in structured garages with one level below grade and up to five levels above grade. The proposed residential parking is equivalent to approximately 1.75 spaces per unit. The exact number of spaces provided will be per the City of San Jose's code and subject to the unit mix. No off-street parking will be provided for the relatively small area of commercial/retail uses west of Delmas Avenue; however, paid parking could be available at the east of Delmas Avenue garage. Access to the parking will be on Delmas Avenue.

For the entire project site, maximum building heights will be within a proposed envelope of 218 feet above-grade at the northern project boundary at West Santa Clara Street, and rising to a maximum height of 264 feet above-grade at the southern project boundary along West San Fernando Street. For commercial structures east of Delmas Avenue, the range of maximum building heights would be approximately 10 to 14 stories, atop a five-level above-grade parking podium, while the residential building(s) west of Delmas Avenue, with lesser height per floor, would be up to about 18 stories tall, also atop a five-level parking podium. The maximum building heights, which are limited by the site's proximity to Mineta San José International Airport, are shown on Figure 4. A cross-section of the proposed building height envelope across the site is shown on Figure 5.

The proposed project includes a minimum 50-foot riparian setback from the top of bank of the Los Gatos Creek and the Guadalupe River riparian corridors (refer to Figures 3 and 4).[4] No permanent building structures, other than landscaping structures, will be included within the 50-foot setback. The proposed 50-foot riparian setback will be divided into three zones, described as follows, and illustrated on Figure 6.

> Zone 1: a 10-foot wide zone measured from the top of bank, will be densely planted with native riparian trees and shrubs. Public access will be prohibited within Zone 1, with the exception of emergency and maintenance vehicle access.
> Zone 2: a 30-foot wide zone (includes Zone 1), measured from the top of bank, will comprise the Santa Clara Valley Water District's maintenance and access easement.
> Zone 3: a 40-foot wide zone beginning at the outer edge of Zone 1, will comprise a City Parks and Recreation easement. Uses within Zone 3 may include landscaping, pedestrian trails, and seating areas. Pedestrian trails will conform to the County's trail standard, which is a minimum of 12 feet in width with two-foot wide shoulders on either side.

An illustrative site plan of how the proposed land use plan might be developed on the site is shown on Figure 7. This plan is an illustrative example with respect to building massing, location and configuration, open space configuration, and pedestrian circulation.

The project will include outdoor recreational amenities to serve the residences on top of the residential parking podium (west of Delmas Avenue). As shown on Figure 7, the Conceptual Site Plan, uses and amenities could include, among others, a pool, game/sports courts, and a play lot.

[4] The limits of the riparian corridor and the property line of the project site are located at the top of bank of Los Gatos Creek (i.e., the property line and the top of bank are conterminous). Along the project's Guadalupe River frontage, there is no riparian vegetation, and the top of bank is the property line for the site.

The historic San Jose Water Company headquarters building is located at the northeast corner of the site at 374 W. Santa Clara Street. The main, rectangular building (approx. 15,900 SF) fronting Santa Clara Street will remain with the proposed project and will have commercial and/or retail uses, subject to market demand. Future new development on the site will be subject to setbacks and height step backs from the San José Water building, as shown on Figure 4. The small 1913 transformer house that is located behind the main San José Water Company building will either be retained in its historic location or relocated as a part of the project (refer to Section II, H, ***Cultural Resources***, of this EIR). All other existing buildings will be removed from the site.

While the exact uses of the proposed project are not known at this time, it is anticipated that the project will accommodate approximately 3,000 employees, based upon a typical density of three employees per 1,000 square feet.

The project site is within the Delmas Park Neighborhood of the Strong Neighborhoods Initiative (SNI) Redevelopment Plan. Since it is within a Redevelopment Area, the project is subject to the requirements of the SNI Redevelopment Plan and state redevelopment law, including the requirement to provide at least 15 percent of the residential units as affordable units. The residential development proposed by the project will include an affordable housing component, in conformance with the City's Inclusionary Housing Requirement.

Access and Infrastructure Improvements

Though the location of the existing intersections at Santa Clara/Delmas and San Fernando/Delmas will remain unchanged, it is proposed that Delmas Avenue be realigned slightly with a bend to the west, to orient pedestrian and vehicle traffic to the adjacent waterways and create a visual link between the park to the north and the future LRT station to the south (refer to Figure 3).[5] The project would include any utility relocations required for the proposed alignment of Delmas Avenue.

The proposed project designates that project access on West San Fernando Street will be via an unsignalized partial-access driveway (right in and right out only) just east of the planned Vasona LRT crossing (approximately 250 feet east of Delmas Avenue). The project does not define the precise dimensions or locations of project driveways on Delmas Avenue. It will be determined at the time of PD Permit approval whether this access will be service only or full access. Accordingly, both scenarios are analyzed in the traffic impact analysis for the project.

Project-sponsored transportation improvements are planned for the roadways and intersections adjacent to the project site. The intersection of Delmas Avenue and West Santa Clara Street will be signalized and the westbound left-turn pocket will be lengthened from 85 to 300 feet. The intersection of Delmas Avenue and West San Fernando Street will be signalized as part of the Vasona LRT project. Additional intersection improvements sponsored by the project include widening West San Fernando Street along the project frontage to add left-turn lanes on the east and west approaches at Delmas Avenue. Furthermore, the PD zoning application also includes widening Delmas Avenue between West Santa Clara Street and West San Fernando Street to provide for a southbound left-turn lane into the project driveway and a second southbound through lane at West

[5] The bend of Delmas was initiated in order to acquire a greater depth for the commercial use area in order to accommodate parking. However, the bend also (from a urban planning/design perspective) creates a greater relationship with both adjacent waterways as well as a connection with the Guadalupe River Park.

San Fernando Street. The project also includes additional roadway improvements on the segment of Delmas Avenue south of San Fernando Street to provide two southbound travel lanes. The project also includes adding one signalized intersection and one right-in/right-out unsignalized intersection on Delmas Avenue between West Santa Clara Street and West San Fernando Street.

Some of the project-sponsored transportation improvements discussed in the two immediately preceding paragraphs (i.e., site access from San Fernando; full intersection improvements along and full widening of Delmas between Santa Clara and San Fernando; widening Delmas south of San Fernando to provide two southbound lanes; widening San Fernando to add left-turn lanes; and signalizing the Delmas/San Fernando intersection) are necessary to mitigate project impacts only once the east of Delmas commercial development is constructed. In other words, traffic from the proposed residential development west of Delmas will not trigger the need for these improvements. As discussed immediately below, because the project likely would be phased (starting with the west of Delmas residential development), these project-sponsored improvements would be constructed only once the east of Delmas commercial development is constructed (refer to Traffic Impact Analysis, Appendix E in Volume III of this EIR).

Project Phasing

It is the intent of the applicant that the project would be constructed in phases, most likely starting with the residential component. The actual timing of the phases would be subject to market demand. It is anticipated that the overall buildout of the project will be completed by 2008.

D. PROJECT OBJECTIVES

The objectives for the project are as follows:

- To create a quality mixed-use (office, residential and retail) project in the greater downtown area that will attract people to downtown and serve as a gateway to the existing downtown area.

- To create an economically viable project that supports all of the desired active uses and amenities serving the project in light of the access constraints imposed on a project surrounded on four sides by waterways and/or transportation infrastructure.

- To create a lively, pedestrian friendly mixed-use development in the greater downtown area.

- To encourage "Smart Growth" by locating dense infill development on underutilized land within the City's Urban Service Area and in proximity to the existing and forthcoming transit opportunities.

- To be consistent with the City's goal of encouraging pedestrian travel as a viable mode of movement between high density residential and commercial areas, particularly in the Downtown Core Area, and improving public access along the rivers/creeks, the project will encourage pedestrian traffic along the Guadalupe and Los Gatos Creeks by delivering quality urban design oriented to the surrounding

amenities and generating the development density necessary to make these amenities successful.

- To support the City's mission of increasing the housing base in the greater downtown area in order to reduce commutes by placing housing in proximity to jobs.

- To promote the new Diridon transit hub by creating a transit-oriented development strategically oriented toward Diridon, light rail and the proposed BART station. To contribute to the success of public transportation by generating the critical mass of development density and pedestrian traffic necessary to support public transit.

- To support the San José 2020 General Plan Major Strategies, which include locating higher density development on infill sites along transit corridors to foster transit use, and the efficiency of urban services and other objectives. To maximize housing opportunities on infill parcels already served by municipal services. To provide major housing and mixed-use developments, which are important components of the Downtown Revitalization Major Strategy that furthers the General Plan's goal of creating a central identity for San Jose.

- To generate employment opportunities for downtown San Jose.

E. USES OF THE EIR

This EIR will be used to provide decision-makers in the City of San José, and the general public with relevant environmental information to use in considering the proposed project. It is proposed that this EIR will be relied upon in issuing the appropriate project-specific development approvals necessary to implement the project, as proposed. These discretionary actions may include the following:

City of San José:

- Planned Development Rezoning to A(PD)
- Planned Development (PD) Permit(s)
- Subdivision Map(s)
- Historic Preservation Permit
- Development Agreement
- Demolition Permits
- Tree Removal Permit
- Street vacation/dedication
- Avigation Easement[6]

[6] An avigation easement is an easement for plane traffic in the airspace above the project. In this case, an avigation easement setting forth the height limits determined acceptable by the Federal Aviation Administration (FAA) and acknowledging the acceptance of aircraft noise impacts will be required for development on the project site.

Other Agencies/Permits:

- Santa Clara Valley Water District Permit – permit for any construction within 50 feet of stream channel
- Department of Toxic Substances Control
- Well abandonment
- Abandonment and/or dedication of public utility easements
- ALUC Finding of Consistency with ALUC Plan

F. CONSISTENCY WITH PLANS AND POLICIES

In conformance with Section 15125(b) of the CEQA Guidelines, the following section discusses the consistency of the proposed project with relevant plans and policies.

1. Regional Plans and Policies

1982 Bay Area Air Quality Plan and 2000 Clean Air Plan ABAG/BAAQMD/MTC

The 1982 Bay Area Air Quality Plan and 2000 Clean Air Plan ('00 CAP) established regional policies and guidelines to meet the requirements of the Clean Air Act, as amended through 1990. The Bay Area is a non-attainment area for ozone(O_3), particulates (PM_{10}), and carbon monoxide, since State and/or Federal standards are exceeded for these pollutants.

The Bay Area '00 Clean Air Plan is the current strategy for improving air quality. The Plan proposes the adoption of transportation, mobile source, and stationary source controls on a variety of pollutant sources to offset population growth and improve air quality. The consistency of the proposed project with this regional plan is primarily a question of consistency with the population/employment assumptions utilized in developing the Plan. The '00 CAP was based on the City's General Plan in effect at the time the CAP was approved.

Consistency: The proposed project would increase the amount of traffic on local streets and freeways near the project site. Construction activities associated with the future development of the site will generate temporary air pollution impacts. The provision of a significant number of housing units and retail commercial in proximity to transportation facilities and the job centers of Downtown San José and Northern Santa Clara County is compatible with the overall goals and policy direction of the '00 CAP. In addition, the General Plan includes measures to encourage transit and bicycle use, and other transportation control measures reflected in the '00 CAP. The proposed project will incorporate measures to encourage transportation control measures reflected in the '00 CAP, as described in Section II,F, ***Air Quality***, of this EIR. Therefore the project is consistent with the Bay Area 2000 Clean Air Plan.

San Francisco Bay Basin Water Quality Control Plan

The Regional Water Quality Control Board has developed and adopted a Water Quality Control Plan (Basin Plan) for the San Francisco Bay region. The Plan is a master policy document that contains descriptions of the legal, technical, and programmatic bases of water quality regulation in the San

Francisco Bay region. The Regional Board first adopted a water quality control plan in 1975 and the last major revision was adopted in 1995.

The Plan provides a program of actions designed to preserve and enhance water quality and to protect beneficial uses based upon the requirements of the Porter-Cologne Act. It meets the requirements of the U.S. Environmental Protection Agency (EPA) and establishes conditions related to discharges that must be met at all times.

The implementation portion of the Basin Plan includes descriptions of specific actions to be taken by local public entities and industries to comply with the policies and objectives of the Plan. These include measures for urban runoff management and agricultural wastewater management.

Consistency: Future development will generate less stormwater runoff than the existing condition of paved parking lots, that covers the entire site with pavement and has minimal landscaping and riparian corridor setback. Future development on the project site would conform to the requirements of the City of San José regarding erosion and sedimentation control during construction, including preparation and conformance with a Storm Water Pollution Prevention Plan, which identifies specific measures for reducing construction and post-construction water quality impacts (see discussion following). Therefore the project is consistent with the San Francisco Bay Basin Water Quality Plan.

Santa Clara Valley Urban Runoff Pollution Prevention Program

The Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP), previously called the Santa Clara Valley Non-point Source Program, was developed in accordance with the requirements of the 1986 San Francisco Bay Basin Water Quality Control Plan, for the purpose of reducing water pollution associated with urban stormwater runoff. This program was also designed to fulfill the requirements of Section 304 (1) of the Federal Clean Water Act, which mandated that the EPA develop National Pollution Discharge Elimination System (NPDES) Permit application requirements for various stormwater discharges, including those from municipal storm drain systems and construction sites.

The State Water Resources Control Board administers the NPDES General Construction Permit for the Santa Clara Valley. For development of properties one acre or greater, a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) must be prepared prior to the commencement of construction. Subsequent to the implementation of the general construction permit, the San Francisco Bay Regional Water Quality Control Board issued a Municipal Storm Water National Pollutant Discharge Elimination System (NPDES) Permit to the municipalities in Santa Clara Valley, the County of Santa Clara, and the SCVWD as co-permittees. Under the provisions of the Municipal Storm Water NPDES Permit, the City is required to take steps within its area of authority to reduce or eliminate pollutants in storm water to the maximum extent practical. The Program assists the co-permittees in implementing the provisions of this permit. NPDES Permits typically establish Waste Discharge Requirements (WDRs), which include discharge prohibitions, effluent limitations, receiving water limitations, and other provisions intended to protect the beneficial uses of the receiving water body.

In 2001, the RWQCB reissued WDRs under the NPDES program for the discharge of stormwater runoff (NPDES Permit No. CAS0299718, Regional Board Order No. 01-024), through the implementation of the Storm Water Management Plans, which describes a framework for

management of stormwater discharges. Order No. 01-124 has been amended to include Provision C.3. concerning new and redevelopment performance standards to address post-construction impacts on stormwater quality.

Consistency: The project is required to comply with Provision C.3 of the City's NPDES Permit (No. CAS0299718), and to the City's local policies and ordinances. Under Provision C.3, no additional reduction in stormwater runoff volumes would be required. As proposed, development of the project site would reduce the amount of impervious surfaces; this would reduce the volume of stormwater runoff under post-development conditions, as compared to existing conditions. Runoff-borne pollution and associated impacts will increase and have the potential to adversely affect water quality both during and after construction of future development. Section II, C, ***Drainage and Water Quality***, of this EIR identifies mitigation measures to reduce water quality impacts of runoff, both during construction and operation of future development. The mitigation measures are consistent with the standards of the Santa Clara Valley Urban Runoff Pollution Prevention Program. Since the existing development did not include best management practices or other measures to reduce pollution in runoff, redevelopment of the project site should result in improvements to the water quality of runoff from the site. Therefore, the proposed project will be consistent with the Santa Clara Valley Urban Runoff Pollution Prevention Program.

Santa Clara Valley Congestion Management Program

The Santa Clara Valley Transportation Authority (VTA) oversees the *Santa Clara County Congestion Management Program* (CMP), which was last updated in May 1998. The relevant state legislation requires that all urbanized counties in California prepare a CMP in order to obtain each county's share of the increased gas tax revenues. The CMP legislation requires that each CMP contain the following five mandatory elements: 1) a system definition and traffic level of service standard element; 2) a transit service and standards element; 3) a trip reduction and transportation demand management element; 4) a land use impact analysis program element; and 5) a capital improvement element. The Santa Clara County CMP includes the five mandated elements and three additional elements, including: a county-wide transportation model and data base element, an annual monitoring and conformance element, and a deficiency plan element.

Consistency: The traffic analysis prepared for the project discusses impacts on regional roadway segments, consistent with CMP policies. As discussed in Section II, E, ***Transportation***, the project is consistent with the provisions of the CMP.

Land Use Plan for Areas Surrounding Santa Clara County Airports

The Airport Land Use Commission (ALUC) of Santa Clara County was formed in accordance with State of California legislature passed in 1970. The ALUC of Santa Clara County prepared the 1992 Land Use Plan for Areas Surrounding Santa Clara County Airports, which provides guidelines for the development of new land uses around each of Santa Clara County's airports. The plan provides guidelines for development regarding aircraft noise and safety, based on Federal Aviation Administration (FAA) guidelines and regulations. The guidelines include restrictions on the types, density, location, and height of uses allowed near airports in Santa Clara County. Specific safety zone policies relevant to the project include restrictions on building height. An exemption to the

policy is granted on a case-by-case basis, if the proposal is supported by evidence presented at a public hearing and deemed by the ALUC to not create a safety hazard.

The Santa Clara County Airport Land Use Plan also establishes airport noise and land use compatibility standards for development within the vicinity of the County's airports. CNEL noise contours presented in this plan are used to evaluate land use compatibility for the proposed developments, and the 65 dB CNEL noise contour is recognized as the residential land use "satisfactory" noise limit for compatible land uses.

Consistency: The project site is located approximately 1.6 miles from the Norman Y. Mineta San Jose International Airport and is under the Airport's approach/departure flight path. As such, various policies and standards of the ALUC's Land Use Plan are applicable to the site. The project site is not located within a designated ALUC safety area.

The Santa Clara County ALUC reviewed and acted on three previous General Plan amendments for the project site, as follows. GP00-03-05a covered 2.1 acres on the west side of Delmas Avenue, where the General Plan was amended from General Commercial to Mixed Use/Residential Support for the Core Area (25+ du/ac). The ALUC voted 5-0 to find the project in conformance with the safety, height and noise policies as defined by the *Land Use Plan for Area Surrounding Santa Clara County Airports*, with the stipulation that the City of San José impose a height restriction on the site in conformance with the ALUC Height Restriction boundary map in effect when specific development projects are proposed, and require avigation easements. Proposed GP00-03-05b covered 4.5 acres on the east side of Delmas Avenue and a similar General Plan amendment was proposed from General Commercial to Residential Support for the Core Area (25+ du/ac). The ALUC voted 5-0 to find the proposal not in conformance with ALUC noise policies and no change to the General Plan occurred . Lastly, GP02-03-04 amended the language of *Mixed Use/Residential Support for the Core Area (25+ du/ac)* on the subject site to increase the allowed housing density from 0-116 dwelling units to 0-364 dwelling units. The ALUC voted 5-0 to find GP02-03-04 in conformance with the safety, height and noise policies as defined by the *Land Use Plan for Area Surrounding Santa Clara County Airports*, with the stipulation that the City of San José impose a height restriction on the site in conformance with the ALUC Height Restriction boundary map in effect when specific development projects are proposed, and require avigation easements.

The ALUC Plan requires building heights to be in compliance with the standards of Federal Aviation Regulations Part 77. The published federal criteria for San José International Airport restrict the elevation of structures on the project site to a maximum of 208 feet above mean sea level (approximately 125 feet above ground level, if the site elevation is 83 feet). However, in compliance with federal regulations, the Federal Aviation Administration (FAA) has completed an aeronautical study for five proposed buildings on the project site ranging in elevation from 317 feet to 347 above mean sea level (234 feet to 264 feet above ground level) and determined that they would not create any adverse safety impact on aviation.[7] A copy of the FAA's Determination of No Hazard to Air Navigation is included in Appendix B of this EIR. As a condition of this determination, the structures would be marked and/or lighted. Future development on the site would adhere to the land use development standards proposed as a part of the PD Zoning, which include a maximum building height envelope. A cross-section of the proposed building height envelope is shown on Figure 5. Since the FAA aeronautical study was based on a prior site plan with five towers rather than four,

[7] At the request of the applicant, the FAA completed an aeronautical study for the project under the provisions of 49 U.S. C., Section 44718 and Title 14 of the Code of Federal Regulations, Part 77.

further FAA review and approval could be required if the project proposed at the PD permit stage is significantly different from the five-tower plan reviewed by the FAA.

According to the noise contour maps prepared by the Airport, a small portion of the residential parcel west of Delmas Avenue (and the entire east-of-Delmas parcel) will be exposed to existing and future aircraft noise levels exceeding a CNEL of 65 dBA. Mitigation measures will be incorporated into the proposed structures located within the 65 CNEL contour to achieve a compatible interior noise environment (CNEL/DNL 45 dBA), consistent with County ALUC guidelines.

An avigation easement setting forth the height limits determined acceptable by the FAA and acknowledging the acceptance of aircraft noise impacts will be required for development on the project site. The proposed rezoning will itself be referred to the ALUC for a determination of consistency. Through the measures, the project conforms to the 1992 Land Use Plan for Areas Surrounding Santa Clara County Airports.

2. Local Plans and Policies

San José 2020 General Plan

The General Plan is an adopted statement of goals and policies for the future character and quality of development of the community. All major strategies are designed to reinforce and support each other for internal consistency. A summary of the major strategies and policies that apply to the proposed project is presented below.

Land Use/Transportation Diagram

The portion of the site west of Delmas Avenue is designated in the San José 2020 General Plan as *Residential Support for the Core (25+ du/acre)* and the portion of the site east of Delmas Avenue is designated *General Commercial*. The *Residential Support for the Core* is intended for high density residential uses (25+ dwelling units per acre) in and near the Downtown Core Area. This designation permits development with commercial uses on the first two floors, with residential use on upper floors, as well as wholly residential projects. Development within this category is intended to expand the potential for residential development in close proximity to central area jobs, and to create new consumer markets in the Downtown area. *General Commercial* is a non-specialized commercial designation intended to permit miscellaneous commercial uses. It includes strip commercial area, freestanding commercial establishments, and business and professional offices. Uses that have both commercial and industrial characteristics may also be permitted, as long as they comply with commercial development standards, do not adversely impact residential neighborhoods, and are not located within pedestrian oriented retail commercial strips. The proposed uses are consistent with the site's General Plan land use designations.

Major Strategies

Economic Development Strategy

The City of San José's Economic Development Strategy strives to make San José a more "balanced community" by encouraging more commercial and industrial development to balance existing residential development, by creating an equitable distribution of job centers and residential areas, and by controlling the timing of development. San José currently houses many more employed residents

than it has jobs, therefore its existing jobs/housing balance needs improvement. The proposed project promotes economic development in San José by creating additional jobs when compared to the existing use of the site, as well as proposing housing proximate to employment elsewhere in the City. The proposed development is located adjacent to existing and future transit locations. For these reasons, the project is consistent with the Economic Development Strategy.

Growth Management Major Strategy

The Growth Management Major Strategy provides direction to the growth the City will experience in the future. The City strives to provide commercial and industrial uses in order to balance service demands and revenue sources with the location of housing to minimize service costs.

The project is consistent with the Growth Management Major Strategy. It is an infill mixed use project that is adjacent to existing and future transit. The project will maximize the efficient use of urban facilities and services and will improve the City's jobs/housing balance.

Downtown Revitalization Major Strategy

The Downtown Revitalization Major Strategy is intended to develop and protect the perceived identity of the Downtown area as the heart of San José. Policies promote a busy, vital economic and cultural center with high levels of activity and a broad mix of uses.

The project is located adjacent to the Downtown Core Area. Buildout of the project will replace an underutilized infill site adjacent to transit with high density commercial, office, and residential uses. These uses will introduce employees and residents to the Downtown area, which will support the Downtown revitalization.

Housing Major Strategy

The goals of the City of San José's Housing Major Strategy include improving San José's existing housing resources, meeting the housing needs of all segments of the community, and providing a variety of housing types within the community for all economic levels. The General Plan states that sound growth should be encouraged in the city by designating suitable vacant or underutilized sites for new residential development. The General Plan Housing Strategy encourages a variety of housing types and opportunities to meet the needs of all economic segments of the community in stable neighborhoods that have adequate urban services. To achieve this objective, the City's housing strategy includes careful planning for residential land uses at appropriate locations and densities. The strategy seeks to maximize housing opportunities on infill parcels already served by the City and to consider the addition of new residential lands only when the City is confident that urban services can be provided. It also seeks to provide sufficient housing opportunities for new workers to encourage and support continued economic development. For those households that need help in finding affordable housing, the strategy includes financial assistance and other measures to encourage the construction, rehabilitation, and conservation of affordable housing. The essential components of the housing strategy include (1) General Plan land use and housing policies, and (2) the housing assistance programs and activities described in the City of San José Consolidated Plan administered by the Housing Department.

The project will develop an underutilized infill site adjacent to the Downtown Core Area with a mixed use commercial and residential development that includes up to 325 units of high density

residential units. The site is adjacent to existing and future transit development and is served by existing City utilities and services. The project, therefore, will support the Housing Major Strategy.

Sustainable City Major Strategy

The Sustainable City Major Strategy is a statement of San José's commitment to becoming an environmentally and economically sustainable city. Programs promoted under this strategy include recycling, waste disposal, water conservation, transportation demand management, and energy efficiency. The Sustainable City Strategy is intended to support these efforts by ensuring that development is designed and built in a manner consistent with the efficient use of resources and environmental protection.

Future development of the site with high density housing, commercial uses, and jobs adjacent to existing and future transit, will conserve energy and other resources. The project supports the City's Sustainable City Major Strategy.

General Plan Goals and Policies

Balanced Community Policy #1

The City should foster development patterns which will achieve a whole and complete community in San José, and improve the balance between jobs and economic development with housing to the greatest extent feasible.

The proposed redevelopment of the site will be compatible with the Balanced Community Goal, because it will contribute to the supply of jobs and provide jobs in proximity to existing and future housing opportunities, as well as existing and future transit.

Economic Development Goals #1 and #2

The two basic economic development goals in the General Plan are: 1) create more job opportunities for existing residents; and 2) create a stronger municipal tax base by obtaining a greater share of commercial and industrial growth in the County, and by nurturing and encouraging expansion of existing development. The City should reduce the imbalance between jobs and workers residing in San Jose. As stated in the General Plan, a perfect balance between the number of jobs and employed residents may not be achievable, but the City should attempt to achieve a minimum ratio of 0.80 jobs/employed residents to attain greater fiscal stability.

The approximate 1.025 million square feet of new commercial and retail uses proposed by the project could provide up to 3,000 jobs and would improve San Jose's jobs/housing balance and would increase the City's municipal tax base. Additional housing at an infill location adjacent to transit will also support existing and planned employment in San José.

Residential Land Use Policy #3

Higher residential densities should be distributed throughout the community. Locations near commercial and financial centers, employment centers, light rail transit stations and along bus transit routes are preferable for higher density housing.

The project proposes high density residential uses as part of a mixed-use commercial and residential development on an infill site that is adjacent to existing and future transit. Therefore, the project is consistent with this policy. It should be noted that the project site was identified in the City's Housing Opportunities Study, but the east of Delmas Avenue portion was ultimately not included in the General Plan amendment to residential use, because of airport-related restrictions (see GP00-03-05a and b).

Commercial Land Use Policy #1

Commercial land in San José should be distributed in a manner that maximizes community accessibility to a variety of retail commercial outlets and services and minimizes the need for automobile travel. New commercial development should be located near existing centers of employment or population or in close proximity to transit facilities and should be designed to encourage pedestrian and bicycle access through techniques such as minimizing building separation from the street, providing convenient and pleasant pedestrian connections, secure bike storage, etc. Employee intensive uses should be encouraged to located along multi-modal transit corridors.

The project proposed 1.025 million square of commercial development at an infill site that is adjacent to existing and future multi-modal transit, and is proximate to existing centers of employment and services.

Transportation Policy #38

Development in the vicinity of airports should be regulated in accordance with Federal Aviation Administration guidelines to: 1) maintain the airspace required for the safe operation of these facilities; and 2) avoid reflective surfaces, flashing lights and other potential hazards to air navigation.

The project will comply with the notification requirements of Federal Aviation Regulations Part 77 and FAA issuance of a no-hazard determination for the proposed buildings, if they differ significantly from the five-tower plan for which a no-hazard determination already was issued. Through these measures, the project will comply with Transportation Policy #38.

Transportation Policy #40

As a condition of approval of development in the vicinity of airports, the City shall require avigation easement dedications.

The project's requirement for avigation easements setting forth the height limits determined acceptable by the FAA and acknowledging the acceptance of aircraft noise impacts will comply with Transportation Policy #40.

Historic, Archaeological and Cultural Resource Policy #1

Because historically or archaeologically significant sites, structures and districts are irreplaceable resources, their preservation should be a key consideration in the development review process.

As described in Section II, H, ***Cultural Resources***, of this EIR, the project would remove the house at 45 Delmas Avenue, which has been determined not eligible for the National Register of Historic

Places or the California Register. A significant CEQA resource is considered a property listed on, or potentially eligible for inclusion on the California Register of Historic Resources, a California Historic Landmark, or a Candidate City Landmark in the City of San José Historic Resources Inventory. Since the house at 45 Delmas Avenue does not meet any of these criteria, it is not considered a significant CEQA resource. The building is, however, listed on San José's Historic Resources Inventory and qualifies as a Structure of Merit. The house at 45 Delmas Avenue will be offered with relocation assistance to anyone who will move it off the site. If no one offers to move the house, it will be demolished, following salvage operations. The relocation assistance and salvage measures were developed through consideration of preservation of 45 Delmas Avenue in the development review process. In the event the house at 45 Delmas is successfully relocated, then the project would be consistent with Historic, Archaeological and Cultural Resource Policy #1. In the event it is not successfully relocated, the loss of a Structure of Merit would not be consistent with Policy #1.

Historic, Archaeological and Cultural Resource Policy #5

New development in proximity to designated historic landmark structures and sites should be designed to be compatible with the character of the designated historic resource. In particular, development proposals located within the Areas of Historic Sensitivity designation should be reviewed for such design sensitivity.

As described in Section II, H, ***Cultural Resources***, of this EIR, the project includes design guidelines that would avoid significant impact to the historic integrity of the designated historic San José Water Company building. The project, therefore, is consistent with Historic, Archaeological and Cultural Resource Policy #5.

Historic, Archaeological and Cultural Resource Policy #8

For proposed development sites which have been identified as archaeologically sensitive, the City should require investigation during the planning process in order to determine whether valuable archaeological remains may be affected by the project and should also require that appropriate mitigation measures be incorporated into the project design.

As described in Section II, H, ***Cultural Resources***, of this EIR, there is a moderate to high potential that grading and excavation for the project could uncover archaeological and historic resources. For this reason, mitigation measures are included in the project to reduce potential impacts to a less than significant level. The project, therefore, is consistent with Historic, Archaeological and Cultural Resource Policy #8.

Historic, Archaeological and Cultural Resource Policy #9

Recognizing that Native American burials may be encountered at unexpected locations, the City should impose a requirement on all development permits and tentative subdivision maps that upon discovery of such burials during construction, development activity will cease until professional archaeological examination and reburial in an appropriate manner is accomplished.

As described in Section II, H, ***Cultural Resources***, of this EIR, upon discovery of Native American burials during construction, development activity will cease until professional archaeological

examination and reburial in an appropriate manner is accomplished. The project, therefore, is consistent with Historic, Archaeological and Cultural Resource Policy *#9.*

Riparian Corridor Policy

The Riparian Corridor Policy in the City of San José's General Plan is specifically tied to the policies of the *Riparian Corridor Policy Study*. The Study provides a guide to protect biotic resources when development occurs along creek systems. The Riparian Corridor Policy is designed to minimize impacts to riparian resources and help protect riparian habitat. Los Gatos Creek runs along the western boundary of the site and the Guadalupe River runs along the eastern boundary of the site. The existing development on the site currently extends to the top of bank of the creek, with no setback.

As noted in the Riparian Corridor Policy Study, the General Plan Scenic routes and Trails Diagram designates the Guadalupe River and Los Gatos Creek as Trails and Pathways Corridors. Policies in the General Plan state that "new development adjacent to [trails and pathway] corridors [should] not compromise safe trail access…(Trail and Pathways Policy 1, pg. 99) "When development occurs adjacent to a designated Trails and Pathways Corridor, the City should encourage the developer to install and maintain the trail." (Trails and Pathways Policy 2) "Trails and pathways should be designed and constructed in a manner which allows safe access to each type of trail experience for people of all abilities to the maximum extent possible." (Trails and Pathways Policy 9)

The specific guidelines from the Riparian Corridor Policy most relevant to the proposed project are related to setback areas, habitat protection objectives, and the encroachment of lighting, noise and toxic substances into the riparian zone.

Guideline 1C: Setback Areas

The City of San José's Riparian Corridor Study Policy states development adjacent to riparian habitats generally should be set back 100 feet from the outside edge of the riparian habitat (or top of bank, whichever is greater) to reduce anticipated impacts to riparian setback communities and hydrologic regimes. The establishment of an appropriate riparian setback area between the corridor and urban development can prevent: loss of groundwater recharge; reduced stormwater detention and filtration; disturbance to wildlife breeding and/or foraging from excessive noise and/or night lighting; loss of edge habitat that reduces value of the corridor for many wildlife species; and the introduction of non-native plant and animal species that reduce riparian habitat quality.

Consistency: The City of San José's Riparian Corridor Policy generally requires that new developments be set back 100 feet from the edge of the riparian corridors. These setbacks are typically measured from the top of bank or edge of the riparian corridor, whichever is closer. However, the Riparian Policy provides for setback exceptions for "locations in or near downtown San Jose and urban infill projects." The minimum setback distance allowed under this exception is "no less than 30 feet." Based on the existing biological conditions of the riparian corridors adjacent to the site, the presence of paved parking lots up to the edge of the riparian canopies, and the presence of urban land use on both sides of these waterways, the proposed minimum 50-foot setback is considered sufficient by the EIR biologist to protect sensitive species and buffer the habitat from impacts resulting from the operation of the proposed project (refer to Section II, D, ***Biological Resources***). The minimum 50-foot setback area of Los Gatos Creek and Guadalupe River will be

divided into three zones, as follows: within 10 feet of the top-of-bank or edge of the drip line of riparian vegetation, the setback will be densely planted with native trees and shrubs. Public access will be prohibited within the 10-foot setback area, with the exception of emergency and maintenance vehicle access. The Santa Clara Valley Water District will have an access easement within a 30-foot setback, measured from the top-of-bank. Between the 10-foot and 50-foot setback, will be a parks/open space easement that will include the pedestrian trail, landscaping, and seating areas. A cross-section of the proposed riparian setback zones is shown on Figure 6. The Riparian Corridor Policy (pgs. 41- 43) states the multi-use trails can be located 10-feet from the riparian edge and that passive use areas (including trails and seating and small picnic areas) may be located immediately adjacent to the riparian corridor. The project includes measures to protect the riparian corridors from lighting impacts, and water quality impacts during construction and operation of the project, as described in Section II, C, ***Drainage and Water Quality***, and II, D, ***Biological*** Resources. Through these measures, the project will be consistent with the intent of the Riparian Corridor Policy.

Strong Neighborhoods Initiative (SNI)

The Strong Neighborhoods Initiative is a partnership of the City of San Jose, San Jose Redevelopment Agency, and the community to build clean, safe, and attractive neighborhoods with independent and capable neighborhood organizations. The SNI Redevelopment Plan was adopted in June 2002. The project site is located within the Delmas Park neighborhood SNI Redevelopment Project Area, that is bordered by West Santa Clara Street on the north, Interstate 280 on the south, State Route 87 on the east, and Bird Avenue on the west. The neighborhood is a mixture of residential, commercial, and light industrial uses. The vision for the neighborhood is that over time it will become more pedestrian and transit oriented, with community-focused commercial corridors, and well-lit, tree-lined streets. Existing residential areas will be preserved and enhanced through the implementation of the Delmas Park Neighborhood Improvement Plan.

All new and substantially rehabilitated residential development within redevelopment areas in San José (such as the Delmas Park SNI neighborhood) must comply with the provisions of the San José Inclusionary Housing Policy. For sale projects, the Redevelopment Area Inclusionary Housing Requirement can be met through one of the following means, at the option of the developer: 1) at least twenty percent (20%) of the "for sale" units developed within a residential project subject to this policy must be made available for the term of the restriction at "affordable housing cost" to "low or moderate income" households; or 2) at least six (6%) percent of the "for sale" units must be made available for the term of restriction at "affordable housing cost" to "very low income" households and nine (9%) percent must be made available to "low or moderate income" households, for a total of 15% of the units restricted pursuant to the requirements of Health and Safety Code Section 33413(b)(2).

Consistency: The proposed project will develop a mixed use commercial and residential development on an underutilized site that is adjacent to a future light rail station serving the Delmas Park neighborhood. The proposed trails along Los Gatos Creek and the Guadalupe River will encourage pedestrian access. The project will provide employment opportunities and retail shops and services for the neighborhood. While the proposed development is much larger in scale than the existing uses within the neighborhood, it is consistent with the General Plan and is compatible with the planned development in the area. Since it is within a Redevelopment Plan Area, the project is subject to the requirements of the SNI Redevelopment Plan and state redevelopment law, including the requirement to provide a certain portion of the residential units as affordable units. The residential development proposed by the project will include an affordable housing component, in

conformance with the City's Inclusionary Housing Requirement. For these reasons, the project is generally compatible with the Strong Neighborhoods Initiative.

City Council Policy on Preservation of Historic Landmarks

Since historically and architecturally significant buildings provide an irreplaceable link to the City's past and enrich the present and future with their rich tradition and diversity, it is the policy of the City of San Jose to strongly encourage preservation and adaptive reuse of designated landmark structures. Proposals to alter such structures must include a thorough and comprehensive evaluation of the historic and architectural significance of the structure and the economic and structural feasibility of preservation and/or adaptive reuse. Every effort should be made to incorporate existing landmark structures into the future plans for their site and the surrounding area.

Applicability

This policy affects any designated City Landmark structure, Contributing Structure in a City Landmark Historic District, a structure designated on the State of California Register of Historic Places, the National Register of Historic Places, a Contributing Structure in a National Register Historic District, or a structure that qualifies for any of the above, based on the applicable City, State, or National qualification criteria. (hereafter "'landmark structure"). This policy does not apply to single family residential structures.

Requirements

1. Early Public Notification of proposals to alter or demolish a landmark structure. In order to allow greater public input into decisions affecting historic landmarks, early public notification should be initiated in response to either of the following: 1) receipt by either the City or Redevelopment Agency of a development application for a project proposing to alter the original character of a landmark structure, or 2) prior to action by the City Council or Redevelopment Agency Board of Directors to commit public funding or other assistance to such a project or for acquisition of property containing a landmark structure. Such notification shall be provided to the City Council, Historic Landmarks Commission and representatives of the historic preservation community.

2. **Public Input and City Council Review.** As soon after the public notification as possible, public meetings on the proposed project shall be scheduled, as follows. In the case of a private development project with no City or Redevelopment Agency funding involved, the Historic Landmarks Commission shall hold a public meeting on the proposed project, to receive public comment and provide recommendations regarding information to be included in the analysis of the proposed project. In the case of a project incorporating City or Redevelopment Agency funding or other assistance, or acquisition of property containing a landmark structure, the City Council shall agendize discussion of the project to receive Public comment and provide early direction to the appropriate staff that either-. 1) the project should continue forward through **the** appropriate review process or 2) the Council does not support the proposed project and further staff work shall be discontinued.

3. **Preparation of Complete information regarding Opportunities for Preservation of the Landmark Structure.** The analysis of a proposed project which will alter the original character of a landmark structure shall include complete historic and architectural documentation of the significance of the building, a comprehensive evaluation of the economic and structural feasibility of

preservation and/or adaptive reuse of the structure, and an analysis of potential funding sources for preservation. This information shall be given strong consideration in the decision-making process for a project proposing to alter a landmark structure. Every effort should be made to preserve and incorporate existing landmark structures into the future plans for a site and the surrounding area.

4. **Findings Justifying Alteration or Demolition of a Landmark Structure.** Final decisions to alter or demolish a landmark structure must be accompanied by findings which document that it is not feasible to retain the building or which record the overriding considerations which warrant the loss of the landmark structure.

5. Financial Resources for Preservation. The City and Redevelopment Agency should identify funding resources to support and encourage the preservation and adaptive reuse of landmark structures

Consistency: As described in Section II, H, ***Cultural*** Resources, of this EIR, the proposed project will alter the historic San José Water Company building by removing all buildings except the main office building and the 1913 Transformer house, and by constructing new development in proximity to the historic building. The property at 374 West Santa Clara Street (APN No. 259-38-128), which includes the San José Water Company headquarters office building and associated buildings and structures, has been determined eligible for the National Register. National Register properties are also automatically eligible for the California Register. The proposed project includes design guidelines that would avoid a significant impact to the historic integrity of the main office building from building new development in proximity to the historic building. San Jose Municipal Code Chapter 13.48 requires a Historic Preservation Permit for any development including demolition and construction on the City Historic Landmark site identified by a legal description in the designation resolution. The Director could refer any development on the subject site (east of Delmas Avenue) to the Historic Landmarks Commission for recommendation. Through these measures, the new construction will be consistent with the City Council policy.

II. ENVIRONMENTAL SETTING, IMPACTS & MITIGATION

The following section evaluates the potential for the project to result in significant environmental impacts and describes mitigation measures for the identified significant impacts. Refer to Section VII of this EIR (page 197) for a discussion of environmental issues that were initially reviewed and found to be less than significant, generally because they do not apply to the project or project site.

A. LAND USE

1. Existing Setting

The project is proposed on a 8.83 gross-acre site that is located in the Diridon Station area at the western edge of downtown San José, in what is considered the "Frame" area of the downtown core. The site is bound by West Santa Clara Street to the north, West San Fernando Street and the future (under construction) Vasona Corridor LRT station and tracks to the south, and the riparian channels of Los Gatos Creek and the Guadalupe River to the west and east, respectively. The site is comprised of two properties that are bisected by Delmas Avenue, a public street. The historic San José Water Company headquarters building and ancillary buildings are located at the north end of the eastern property. The remainder of the eastern property is currently a privately owned and operated public parking lot. There is a single family residence located mid-block facing Delmas Avenue on the western property. The remainder of the western property is also developed as a privately owned and operated public parking lot, as described below. An aerial photograph of the site and surrounding area is shown on Figure 8.

Existing On-Site Parking Conditions

The project site is private property, owned by the SJW Land Company. The site is currently developed with two self-park surface parking lots that provide hourly public parking. The total number of parking spaces currently provided on the site is 730, which includes 300 spaces on the west side of Delmas Avenue and 430 spaces on the east side of Delmas Avenue.[8] Due to the site's proximity to the HP Pavilion (formerly the San Jose Arena), the parking lots are typically used for Pavilion events. San José Water Company, however, does not have any contractual obligation to provide Pavilion parking.

While the SJW Land Company is under no legal obligation to provide Pavilion parking on-site, the City of San José and the San José Redevelopment Agency do have an agreement with the Pavilion to provide a minimum number of parking spaces in the project area to serve Pavilion patrons. The City of San José and the San José Arena Management Corporation entered into an agreement on October 24, 1991 that included, among other things, the provision of a minimum number of parking spaces for Pavilion patrons. Under this Agreement, the City must make available for use by patrons of Pavilion events as needed on all event days, certain off-site parking facilities after 6:30 p.m. on weekdays and for a reasonable amount of time before, during, and after events on weekends. The off-site parking facilities may include available on-street parking spaces and off-street parking lots or garages owned by the City, the Redevelopment Agency, or third parties. The City will actively pursue reasonable best efforts to achieve and maintain at least 6,350 parking spaces

[8] Janelle McCombs, Director of Real Estate, San José Water Land Company, written communication, August 2002.

at off-site parking facilities within one-half mile of the West Santa Clara entrance to the Pavilion, and to secure approximately one-half of the 6,350 spaces (3,175 parking spaces) within one-third mile of the West Santa Clara entrance to the Pavilion.[9]

According to the City of San José, Department of Transportation, there are currently 3,275 unrestricted parking spaces within one-third mile of the West Santa Clara entrance to the Pavilion at 6:30 p.m., not counting the parking spaces at the project site.[10] There are currently 6,724 unrestricted parking spaces between one-third and one-half mile of the West Santa Clara entrance to the Pavilion at 6:30 p.m.[11] The off-street parking facilities are shown on Figure 9. Based upon this information, there are more than enough parking spaces available in the Pavilion vicinity, not counting the project site spaces, for the City to meet its requirements to provide Pavilion patron parking.

Surrounding Area

The project site is surrounded by a variety of land uses (see Figure 8). The Guadalupe River is located along the eastern edge of the site. A large flood control project is currently under construction on the reach of the Guadalupe River abutting the project site. Elevated above the river is State Highway 87, the Guadalupe Freeway. South of the site is West San Fernando Street and the Delmas Avenue residential neighborhood, which is part of the potential Lake house/Delmas Historic District. The future VTA Vasona Corridor LRT alignment crosses the southwest edge of the site, and a LRT station will be located adjacent to the southwest corner of the site. Two blocks west of the site is the Diridon Caltrain and Amtrak Station. Along the west edge of the site is the mature riparian channel of Los Gatos Creek. North of the site is West Santa Clara Street and the Guadalupe River Park and Confluence Park. Across West Santa Clara Street and just northwest of the Site is the *HP Pavilion.*

General Plan and Zoning

The General Plan land use designation for the project includes *Residential Support for the Core (25+ dwelling units per acre)* on the portion of the site west of Delmas Avenue, and *General Commercial* on the portion of the site east of Delmas Avenue. The site is zoned *CN-Commercial Neighborhood, LI-Light Industrial,* and *HI-Heavy Industrial*. Permitted uses in the CN *Commercial Neighborhood* District include neighborhood centers, multi-tenant commercial development along major arterials, and small corner commercial establishments. Permitted uses in the LI *Light Industrial* District including labs, light manufacturing, and warehouse uses. Permitted uses in the HI *Heavy Industrial* District include research labs, manufacturing and assembly plants, printing shops and warehouse uses.

[9] Minimum number of parking spaces required to be provided under San José Arena Management Agreement, Section 15.02, Off-Site Parking, October 24, 1991.
[10] Bhavani Yerrapotu, City of San José, Department of Transportation, *2001 Base Parking Inventory, Off-Site Parking Facilities within 1/3 Mile of Compaq Center South Entrance*, January 30, 2002.
[11] Bhavani Yerrapotu, City of San José, Department of Transportation, *2001 Base Parking Inventory, Off-Site Parking Facilities between 1/3 and 1 /2 Mile of Compaq Center South Entrance*, January 30, 2002.

Strategy 2000: The Greater Downtown San José Strategy for Development

Strategy 2000, the Downtown Strategy Plan, is an unadopted, draft plan that was created for the Redevelopment Agency of San Jose to serve as a guide for development activities in the Greater Downtown planned for 2000-2010. The project site is located within the Diridon/Arena Area of the Plan, which is bound generally by Wilson Avenue to the west, West Saint John to the north, Highway 87 to the east, and West San Carlos to the south. The Plan encourages high and mid-rise office and housing development with ground floor commercial and entertainment uses. The Plan also calls for development of linear parks along Los Gatos Creek and the Guadalupe River. An action item of the plan is to develop the San José Water Company site with high-value mixed-use development to anchor the Diridon area.

Constraints to Development

The project site is an infill site, within the urbanized area of the City of San Jose. Physical conditions on or near the project area which could cause potential constraints to future development include:

- Proximity to Norman Y. Mineta (San Jose) International Airport
- Proximity to the SR 87 Freeway
- Proximity to riparian corridors of Los Gatos Creek and the Guadalupe River.
- Proximity to the future Vasona Corridor LRT line and LRT station
- Location on a site formerly developed with a variety of industrial uses
- Potential subsurface alignment for future BART extension beneath the project site

The degree to which these conditions might constrain redevelopment of the project area and the mitigation available are discussed in the impact section, which follows. The specific issues of geology, drainage and water quality, biology, traffic, noise, hazardous materials, and aesthetics and shading are discussed in greater detail in their respective sections in Section II of this EIR.

2. Impacts

Thresholds of Significance

For the purposes of this project, a land use impact is considered significant if the project would:

- physically divide an established community;
- conflict with applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect;
- convert prime agricultural land to non-agricultural use, or impair the agricultural productivity of prime agricultural land;

- be incompatible with surrounding land uses or with the general character of the surrounding area, including density or building height; or
- conflict with any applicable habitat conservation plan or natural community conservation plan.

Land Use Compatibility

Land use conflicts can arise from two basic causes: 1) a new development or land use may cause impacts to persons or the physical environment in the vicinity of the project site or elsewhere; or 2) conditions on or near the project site may have impacts on the persons or development introduced onto the site by the new project. Both of these circumstances are aspects of *land use compatibility*. Potential incompatibility may arise from placing a particular development or land use at an inappropriate location, or from some aspect of the project's design or scope. Depending on the nature of the impact and its severity, land use compatibility conflicts can range from minor irritations and nuisance to potentially significant effects on human health and safety. The discussion below distinguishes between potential impacts *from* the proposed project *upon* persons and the physical environment, and potential impacts *from* the project's surroundings *upon* the project itself.

Impacts from the Proposed Project

The proposed project, a high density, infill project comprised of office, retail, and residential uses, would not physically divide an established community; nor would result in a loss of agricultural land or impair agricultural productivity. The City of San José does not currently have a habitat conservation plan or natural community conservation plan in place; therefore, the project site is not included in a habitat conservation plan or natural community conservation plan. The existing on-site parking lots, while undeveloped, are not considered open space in terms of their recreational or visual character. The effects of the proposed loss of Pavilion parking are discussed subsequently in this section. The change in visual character and potential shading impacts resulting from the project is described in Section II, J, ***Aesthetics and Shading***, of this EIR.

Loss of On-Site Parking

The proposed project will redevelop the existing single-family residence, a portion of the San José Water Company facility, and the two on-site parking lots with a large mixed-use project with structured parking. The project includes, at full buildout, development of approximately 570 parking spaces for the proposed residential uses and between 2,075 and 3,075 parking spaces for the proposed commercial uses on the site. The parking will be located within up to two levels of below grade and five levels of above-grade parking structure. At full buildout, therefore, the project will result in a net increase in commercial parking spaces on the site (2,075 to 3,075 proposed commercial spaces – 730 existing = 1,345 to 2,345 more spaces). A more detailed description of the proposed parking is presented on page 5 of this EIR.

It is possible that the SJW Land Company could make some or all of the 2,600 future commercial parking spaces available for Pavilion patron use after 6:30 p.m. As described previously, even if the SJW Land Company decides not to make the on-site spaces available, there are more then enough parking spaces available in the vicinity of the Pavilion to meet

the City's contractual agreement to provide Pavilion patron parking in proximity to the Pavilion. The available parking spaces could be farther away from the Pavilion than the project site spaces, but the spaces would be within the one-half mile radius designated in the City's agreement with the Pavilion. The proposed project, therefore, would not result in any land use impacts related to a loss of Pavilion patron parking.

- **The proposed project would result in a net increase of commercial parking spaces on the site, some or all of which the owner of the site could choose to make available for Pavilion patron parking. Even without the project site spaces, there are sufficient parking spaces available for the City to meets its contractual obligations to provide Pavilion patron parking. The project would not result in significant land use impacts related to a loss of Pavilion patron parking. (Less than Significant Impact)**

Impacts to the Proposed Project

The project site is subject to height limits and noise impacts due to its proximity to the flight paths for San José International Airport. FAA imaginary surface standards limit structures on the project site to a maximum of 208 feet above mean sea level. Pursuant to Part 77 of the Federal Aviation Regulations, any proposed structure which would exceed an FAA imaginary surface, or which would stand at least 200 feet above ground level, is required to submit to the FAA for an airspace safety evaluation. The project applicant has complied with this requirement for up to five proposed buildings ranging in elevation from 317 to 347 feet above mean sea level, each of which has been issued a "Determination of No Hazard" on May 22, 2002 from the FAA.

According to the noise contour maps prepared by the Norman Y. Mineta San Jose International Airport, portions of the project site are exposed to existing and future aircraft noise levels exceeding a CNEL of 65 dBA. Commercial uses proposed east of Delmas Avenue would be located within the future 65 dBA CNEL noise contour. The 65 dBA CNEL contour crosses the northeast portion of the residential parcel west of Delmas Avenue (shown on Figure 16). Residential development proposed in this area would fall within the noise impact boundary, as defined by the state noise regulations, and would be considered an incompatible land use as defined by state and local regulations.

There are two alternative BART alignments currently under consideration by BART that pass through and adjacent to the site. One possible alignment for the future BART extension may extend as a tunnel across the northern portion of the project site. Alternatively, the tunnel alignment could run along Santa Clara Street. The alignment alternatives for the project area are shown on Figure 10. The alignment for this portion of the BART extension is not expected to be finalized until Fall 2003.[12] Since the top of the BART tunnel would be 40 feet below the ground surface, it would not result in any major constraints to the proposed development. The BART tunnel could require coordination during the construction process (depending upon the construction timing of the projects), but it would not cause a long-term land use compatibility impact. It should be noted that the environmental impacts of the BART project will be analyzed in a separate BART EIR and are not included in this project EIR.

[12] Lisa Ives, Project Manager, Santa Clara Valley Transportation Authority, verbal communications, March 2003.

It is possible that existing contamination that is present on the site from former industrial uses could impact construction worker or future workers and residents on the site. Mitigation measures discussed in Section II, I, ***Hazardous Materials***, are expected to reduce any hazardous material impacts from former industrial uses to a less than significant level.

- **Mitigation measures included in the project for noise and hazardous material impacts will ensure that the project does not result in significant land use impacts related to the site's proximity to the Norman Y. Mineta International Airport, or from the former industrial uses on the site. The potential BART alignment crossing the site will not result in a significant land use impact. (Less than Significant Impact)**

3. Mitigation and Avoidance Measures

The following measures are included in the project:

- Prior to issuance of building permits for development, the property owner(s) shall grant an avigation easement[13] to the City of San José. The easement would specify the elevation limits of development on the site and provide for acceptance of aircraft noise impacts. Development on the project site shall comply with the roof-top lighting/marking and notification requirements specified in the FAA's Determination of No Hazard.

- Mitigation measures for air quality, noise, hazardous materials, and visual impacts which would further reduce land use impacts to a less than significant level are discussed in Section II, F, ***Air Quality***, Section II, G, ***Noise***, and Section II, I, ***Hazardous Materials***, and Section II, J, ***Aesthetics and Shading*** of this EIR.

Conclusion: Implementation of the above mitigation measures will reduce land use impacts to a less than significant level. **(Less than Significant Impact with Mitigation)**

[13] Avigation easements are used to grant airports certain rights over the subject land, including: 1) right-of-flight at any altitude above the acquired easement surfaces; 2) right to cause noise, vibrations, fumes, dust, and fuel particle emissions; 3) right to prevent construction or growth of all structures, objects, or natural growth above the acquired easement surfaces; 4) right-of-entry to remove, mark, or light any structures or growth above the acquired easement surfaces, or the right to require the owner to remove, mark, or light them; and 5) right to prohibit creation of electrical interferences, unusual light sources, and other hazards to aircraft flight (*Land Use Plan for Areas Surrounding Santa Clara County Airports*, Airport Land Use Commission, September 1992).

B. GEOLOGY AND SOILS

The following discussion of soils and geology is based on a geotechnical investigation conducted for the site by *Lowney Associates,* in Oct 2001. The purpose of this report was to evaluate subsurface conditions at the site and to provide preliminary geotechnical recommendations for design and construction of the proposed project. A supplement to the geotechnical report was prepared in January 2003. A copy of these reports is presented in Appendix C of this DEIR.

1. Existing Setting

Geology

The project site is generally flat, with an elevation of between 82.5 to 86.7 feet above mean sea level (msl). Groundwater was encountered at depths of between 16.5 feet to 18 feet below ground surface.

The project site is located between the Los Gatos Creek and the Guadalupe River channels. The creek channels appear to be about 15 to 18 feet deep and in some locations the banks are steeper than about a 1:1 (horizontal:vertical) ratio.[14] Portions of the creek banks are partially lined with rock and concrete rubble, and other portions of the creek banks are supported by old concrete retaining walls. At the time of the surveys, flowing water was observed in both creek channels, and trees and dense brush were growing along and within the creek banks.

Soils

The majority of the site is covered with asphalt concrete to a depth of four to twelve inches, over zero to six inches of aggregate base. Underneath the pavement, the site is underlain by alluvial and fluvial deposits composed of interwoven layers and mixtures of clay, silt, sand, and gravel. Two to 12 feet of fill, composed of dense silty sand and stiff silty clay, cover most of the site. Fill is also present at locations of former USTs, backfilled basements, and above and around existing and former utilities. Native surface soils were found at depths of about 10 to 22 feet and are characterized as stiff to very stiff silty clay. These soils are generally characterized as low to moderately plastic and low to moderately expansive. The southern portion of the site, however, showed layers of clay with highly plastic and highly expansive characteristics, and the soil in the center of site, along the eastern border, displayed medium dense to very dense silty sand characteristics at depths of between 12 and 19 feet.

Soils at depths of between 19 and 23 feet and between 34 and 42 feet consisted of sandy clay, silty clay, and clayey silt. These soil types have low plasticity and are moderately expansive. At depths of between 22 and 32 feet, there is a clay/silt stratum that is generally stiff in consistency and is also characterized as having low plasticity.

Soils encountered at depths of between 42 feet and 100 feet were generally found to be stiff to very stiff silty clay and sandy clay that contains layers of dense to very dense sand with

[14] The section of the Guadalupe River fronting the site has since been excavated by the U.S. Army Corps of Engineers and the Santa Clara Valley Water District and is currently under construction for the Downtown Guadalupe River Flood Control Project.

occasional gravel. Additionally, occasional very stiff to hard layers of gravelly clay was encountered at random depths and locations throughout the site. Generalized subsurface soil conditions are shown in Figures 3A, 3B, and 3C, titled, *Cross-Sections A-A, B-B, and C-C* in Appendix C of this DEIR.

Soils on the site are characterized as having a severe to very severe corrosion potential to buried metallic improvements

Groundwater

Free groundwater was encountered in all of the borings on site at depths of between 16.5 to 18 feet. Due to the presence of silty sand deposits near the groundwater level, groundwater levels are expected to rise along the western and eastern sides of the site in response to high water levels in Los Gatos Creek and the Guadalupe River during periods of concentrated storm water runoff. Fluctuations in the level of groundwater may occur due to variations in rainfall, underground drainage patterns, water levels in Los Gatos Creek and the Guadalupe River, in addition to other factors not evident at the time groundwater level measurements were made.

Geologic Hazards

Seismicity

The project site is located within the San Francisco Bay Area, which is recognized as one of the most seismically active regions in the United States. Significant earthquakes that occur in the Bay Area are generally associated with crustal movement along well-defined, active, fault zones of the San Andreas Fault system. The San Andreas Fault regionally trends in the northwesterly direction, and passes about 11.5 miles southwest of the site. Two other major active faults in the area are the Hayward Fault, located approximately 9.5 miles northeast, and the Calaveras Fault, located about 8.75 miles northeast of the site. The Southeast Extension of the Hayward Fault is located about six miles northeast and the Monte Vista-Shannon Fault is located about 6.75 southwest of the site. The location of these faults in relation to the project site is shown in Figure 11. In 1999, the U.S. Geologic Survey (USGS) predicted a 70 percent probability of a magnitude 6.7 or greater earthquake occurring in the San Francisco Bay Area by the year 2030.

On February 7, 2002, the State of California Division of Mines and Geology (CDMG) released a map titled, “Seismic Hazard Zones, San José West Quadrangle.” Information on this map indicates that the site is located in an area that has the potential for soil liquefaction, based on the depth to groundwater and presence of recent alluvial deposits. Sites located in these potential seismic hazard zones require site-specific investigation and evaluation following guidelines presented in CDMG Publication 117. The geotechnical investigation and analysis conducted by *Lowney Associates* for the project, presented in Appendix C and summarized in this EIR follow the guidelines in CDMG Publication 117.

Liquefaction and Lateral Spreading

Soil liquefaction is the result of seismic activity and is characterized as the transformation of loosely water-saturated soils from a solid state to a liquid state after ground shaking. There are many variables that contribute to liquefaction including the age of the soil, the soil type, soil cohesion, soil density, and groundwater level. Soils most susceptible to liquefaction are clean, loose, saturated, uniformly graded, and fine-grained sands.

Groundwater was encountered during subsurface exploration on the site at depths ranging from about 16.5 to 18 feet below the ground surface. Groundwater levels measured in three on-site piezometers several weeks after drilling varied from 15.5 to 17.25 feet below ground surface. For the analysis of liquefaction potential, *Lowney Associates* assumed a groundwater depth of 15 feet.

Soils to a depth of at least 100 feet below the site are primarily stiff to very stiff silty clays and dense to very dense silty sands. These clays and dense to very dense sand deposits are not prone to liquefaction even under the influence of severe ground shaking. The site does, however, contain lenses and layers of medium dense clean sand to silty sand within the clays and dense to very dense sands to depths of at least 40 feet. Layers of medium dense silty sand soils were encountered above a depth of 23 feet below ground surface, and vary in thickness from a few inches to about two feet. The results of the subsurface exploration and analysis indicate that the majority of the medium dense, silty sand deposits located below groundwater at the site have moderate to high potential to liquefy during a major earthquake on nearby segments of the Hayward Fault, Monta Vista-Shannon Fault, or San Andreas Fault. The potential for differential compaction of near surface soils is considered low to moderate, and below a depth of 23 feet (below the basement structures) the potential is low.

Lateral spreading, an effect of seismic activity, is a phenomenon in which surficial soil is displaced horizontally toward an open body of water, channel, or excavation. In soils, this movement is often associated with liquefaction. As cracks develop within the weakened soil, blocks of soil displace laterally towards the open face. Liquefaction of layers of medium dense, silty sand along the east and west sides of the site could result in some ground deformation and lateral spreading of portions of the existing creeks banks towards Los Gatos Creek and/or the Guadalupe River.[15]

2. Soils and Geologic Impacts

The proposed project would allow development of several large (10-14-story) commercial buildings and 325 residential units on the site over five levels of above-grade parking and up to two levels of below grade parking. The parking structure on the east side of Delmas Avenue is expected to extend two levels below grade, requiring a basement excavation about 23 to 28 feet below the ground surface. The parking structure on the west side of Delmas Avenue is expected to extend one level below-grade, requiring a basement excavation about 12 to 15 feet below existing grade. The possibility of connecting the two below-grade

[15] It should be noted that the Guadalupe River Flood Control Project has constructed a vertical wall along the project bank of the Guadalupe River that would prevent lateral spreading into the channel.

parking garages by means of a structure below Delmas Avenue is being considered. Additionally, a tunnel for the BART system extension to San José may cross below the southern or central portion of the site at a depth of between 40 to 50 feet below grade.

Thresholds of Significance

For the purposes of this project, a geologic impact is considered significant if the project would:

- expose people or structures to substantial adverse effects including the risk of loss, injury or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic related ground failure (including liquefaction), landslides, or expansive soil;
- expose people or property to major geologic hazards that cannot be mitigated through the use of standard engineering design and seismic safety techniques; or
- cause substantial erosion or siltation.

Soils and Groundwater

The subsurface soils on the site are interwoven layers and mixtures of clay, silt, sand, and gravel that are low to moderately plastic and low to moderately expansive. The presence of moderately expansive soil could damage future development and improvements on the site, which would result in a significant impact. Due to the compressibility of foundation soils and the weight of the proposed high-rise buildings, the proposed building and podium structures will be supported on either driven piles or mat foundations.

Subsurface soil in the site show a severe to very severe corrosive potential which could result in the corrosion of buried metallic improvements. Sulfate exposure to Portland Cement Concrete is considered negligible for the on-site soils that were sampled and tested. A corrosion specialist will advise the project designer and engineer on alternate materials, pipe coatings, etc. for a corrosive soil environment during the design stage, so that the presence of corrosive soils would not result in a significant impact to buried metallic improvements.

♦ **Construction of buildings on and within the moderately expansive and compressible subsurface soils could result in structural damage due to expansion/contraction cycles and settlements. (Significant Impact)**

The proposed below-grade parking structures will be at or below groundwater level and will be subject to hydrostatic uplift pressure from groundwater. Groundwater levels, particularly along the east and west sides of the site, could be shallower during winter and spring months when water levels in the Guadalupe River and Los Gatos Creek are high. The floors and walls of the basement structure will be waterproofed and designed to accommodate groundwater levels.

It should be noted that the pool, if included, would be on top of the residential parking podium, so it will not be affected by hydrostatic pressure or lateral earth pressure.

♦ **Below-grade parking structures will be subject to water filtration and hydrostatic pressure. (Significant Impact)**

To allow construction to proceed effectively, lowering of groundwater levels will be required where basement excavations extend deeper than about 13 to 14 feet below existing grade. The extent of groundwater lowering required will depend upon the type of foundation system that is selected. It is anticipated that groundwater levels will need to be lowered at least three feet below the bottom of excavations for the proposed basements and foundation elements. Groundwater drawdown, however, should be limited (i.e., should be no deeper than) Elevation 50 feet, about 34 feet below existing grade, to limit potential affects to nearby structures and improvements due to settlement produced by groundwater drawdown.

Potential contamination of groundwater, at least in some localized area, could occur during dewatering. The presence of potentially hazardous materials in groundwater at the time of dewatering would restrict the way groundwater pumped from the site is handled and discharged. Potential contamination will be evaluated through sampling and testing of groundwater prior to and during construction. Prior characterization, discharge approval and permits, and a health and safety plan will be required if contaminated groundwater will be pumped during dewatering.

- **The proposed basement excavations will require lowering of groundwater levels, and excessive groundwater drawdown (below elevation 50 feet) could affect nearby structures and improvements due to settlement produced by groundwater drawdown. It is possible that groundwater pumped as a part of the dewatering could contain hazardous materials. (Significant Impact)**

Basement excavations are expected to extend to depths of about 23 to 28 feet below existing ground surface, requiring deep shoring system. Deflections of the shoring system could lead to undesirable ground movements, potentially affecting nearby structures, utilities, and surface improvements. Also, if the sides of the proposed basement excavations are not property sloped or shored, the sides of the excavation could deform, slough, or collapse. There is also a possibility of collapse of other unstable cut slopes and/or trenches. This potential hazard can be reduced by proper design and construction of safe excavation slopes and/or basement shoring systems. The walls of the basement excavations would be supported by soldier beams and wood lagging with tie-backs, as needed, or by other types of suitable shoring system. Similar shoring systems would also be used to support the sides of the excavation across Delmas Avenue that would be used to construct a possible structure connecting the below-grade parking garages.

- **The proposed basement excavations, if not property shored, could lead to undesirable ground movements, potentially affecting nearby structures, utilities and surface improvements. The proposed walls of the excavation could also slump or collapse. (Significant Impact)**

Geologic Hazards

Seismicity

The project site is located within the seismically active San Francisco Bay Area and strong ground shaking can be expected at the site during a moderate to severe earthquake in the region. The project site is located in close proximity to the San Andreas, Calaveras, and Hayward Faults where there is the potential for damage to any of the structures or buildings constructed due to seismic activity. Current understanding of seismic activity indicates the site will likely be subject to at least one moderate to severe earthquake within the next 30 years. Ground shaking on the site could damage buildings, roads, and utilities putting occupants at risk to human health and safety and/or property loss. During an earthquake the danger of fault offset at the site is slight. No known active faults are present on the site, and therefore, surface rupture is considered low.

As noted above, there is a moderate to high potential for liquefaction of isolated medium dense silty sand layers between depths of about 15 to 23 feet below ground surface as a result of a major earthquake in the area. The consequence of liquefaction of isolated sand layers below proposed structures is expected to be limited to a minor amount of settlement, up to about one-half inch at the ground surface. Since the proposed basement on the east side of Delmas Avenue is expected to extend below the potentially liquefiable soils, the foundations and floor of the structure on the east side of Delmas Avenue are not expected to be influenced by liquefaction. In the professional opinion of *Lowney Associates*, if the proposed structure on the west side of Delmas Avenue is supported on either piles or a mat foundation, (as recommended in the geotechnical report), no further mitigation measures would be required for foundation support as a result of the moderate to high liquefaction potential.

Earthquake-induced liquefaction could result in some isolated cracking, lateral movement and/or irregular ground settlement along the eastern and western sides of the site, adjacent to the Los Gatos Creek and/or Guadalupe River banks, potentially impacting surface improvements and utilities in these areas. The project's proposal to set back buildings from the banks at least 50 feet and supporting the buildings on piles or mat foundations will reduce the potential for lateral spreading during a major earthquake.

The proposed project would be designed and constructed in accordance with standard engineering techniques of the Uniform Building Code guidelines for Seismic Zone 4 to avoid or minimize potential damage from seismic shaking on the site.

- **Development along the east and west sides of the site (adjacent to creek channels) would be susceptible to seismically-induced liquefaction and liquefaction-induced lateral spreading. (Significant Impact)**

3. Avoidance and Mitigation Measures for Soils and Geologic Impacts

The following measures are included as part of the project to avoid soils and geologic impacts related to expansive and moderately compressible soils and corrosive soils:

- Buildings and subsurface garages will be designed and constructed in accordance with the design-level geotechnical investigation prepared for the site, which identifies the specific design features that will be required for the project, including site preparation, compaction, trench excavations, foundation and subgrade design, drainage, and pavement design. The geotechnical investigation shall be reviewed and approved by the City Public Works Department prior to issuance of a building permit for the project.

- Prior to development, the site will undergo extensive preparation, including abandoning and/or removing existing wells and utilities in the site; as wells as dewatering, excavation, and fill and compaction design techniques as specified in Appendix C. Subgrade preparation will include shallow and deep excavation to stabilize subgrade material with the use of engineered fill materials.

- A corrosion specialist will advise the project designer and engineer on alternate materials, pipe coatings, etc. for a corrosive soil environment during the design stage, so that the presence of corrosive soils would not result in a significant impact to buried metallic elements of the project.

The following measure is included in the project to reduce impacts related to unstable cut slopes and basement excavation to a less than significant impact.

- To prevent slope failure during basement construction, the walls of the basement excavations would be supported by soldier beams and wood lagging with tie-backs, as needed, or by other types of suitable shoring systems. Where space permits, or where proximity to the creek/river channels does not provide sufficient length for adequate tie-back capacity, the sides of the excavation would be benched or sloped at safe inclinations. The proposed shoring system will be designed in conformance with the recommendations of the geotechnical investigation (Appendix C) of this EIR.

- All temporary slopes and trenches excavated at the site will include temporary shoring. Shoring, bracing, and benching will be conducted in accordance with the strictest governing safety standards.

The following measures are included in the project to reduce impacts related to dewatering to a less than significant impact.

- Groundwater levels across the site will be lowered prior to basement excavation and foundation construction, in accordance with the recommendations of the geotechnical investigation (Appendix C) of this EIR. Groundwater drawdown shall be limited to Elevation 50 feet (above mean sea level), or 34 feet below existing grade, to prevent potential effects to nearby structures and improvements due to settlement induced by groundwater drawdown.

- The presence of potentially hazardous materials in groundwater at the time of dewatering would restrict the way groundwater pumped from the site is handled and discharged. Potential contamination will be evaluated through sampling and testing of groundwater prior to and during construction. Prior characterization, discharge approval and permits (to discharge to the Water Pollution Control Plant), and a health and safety plan will be required if contaminated groundwater will be pumped or discharged during dewatering.

The following measures are included in the project to reduce impacts to subsurface structures from hydrostatic and lateral earth pressures.

- Any proposed retaining walls, such as the walls for the sub-surface basement and garage structures, will be designed to resist lateral earth pressures from adjoining natural materials and/or backfill and from any surcharge loads. Potential support methods include tiebacks, soldier beams, and wood lagging, temporary slopes, or other suitable shoring system. Design specifications are provided in the geotechnical investigation, presented in Appendix C. The contractor shall forward the plan for the support system to the consulting structural engineer and geotechnical engineer for preconstruction review.

- Adequate drainage would be provided by a subdrain system positioned behind the walls to prevent any build-up of hydrostatic pressures from surface water infiltration and/or a rise in the ground water level.

The following measures are included in the project to reduce potential impacts related to seismically induced liquefaction and lateral spreading and seismic shaking.

- Mitigation measures to reduce the potential influence of lateral spreading during a major earthquake on the proposed structures include: supporting the structures on piles or a mat foundation; setting the buildings back from the banks of the creeks at least 50 feet; buttressing the creek banks with structures and/or fills (as has been done along the project's Guadalupe River frontage as a part of the flood control project); and reducing the susceptibility to liquefaction of soils within and below the creek banks by ground improvement techniques such as vibroflotation or grouting. The potential impacts from liquefaction and lateral spreading will be mitigated by following the recommendations of the design-level geotechnical investigations addressing proper foundation technique, design, site preparation, subgrade preparation, and grading as specified in Appendix C

- Seismic hazards to the proposed project will be mitigated by the project utilizing design and construction practices in accordance with Seismic Zone 4 building criteria, as described in the Uniform Building Code. Zone 4 criteria allows structures to resist minor earthquakes without damage and major earthquakes without collapse.

Conclusion: Implementation of the mitigation measures described above and included in the proposed project will reduce potential soils, groundwater, and geologic impacts to a less than significant level. **(Less than Significant Impact with Mitigation)**

C. DRAINAGE AND WATER QUALITY

1. Existing Setting

Hydrology and Flooding

The project site is bounded by Los Gatos Creek to the west and the Guadalupe River to the east. Los Gatos Creek is a tributary of the Guadalupe River, which flows to the San Francisco Bay. The confluence of these two channels is located approximately 550 feet north of the project site. Flows in Los Gatos Creek are controlled by releases of water from Lexington and Vasona Reservoirs, as well as several percolation ponds in the cities of Campbell and Los Gatos.

The northern half of the project site is within the current floodplain of the Guadalupe River. According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps, the project site is located in Zone A0, with flooding a depth of one foot. The site is also subject to sheet flow flooding of less than one foot to approximately two feet in depth from a commingling of flood waters from the Guadalupe River and Los Gatos Creek.[16]

The Guadalupe River Park and Flood Protection Project is currently under construction adjacent to the project site. This large flood protection project, which extends between Interstates 880 and 280, began in 1992 and two phases are completed between I-880 and Coleman Avenue. The project site is located within Reach 3B, which began construction in May 2002 and is scheduled to be completed in December 2004. Along this reach of the project, the west bank of the River will be armored with a vertical concrete retaining wall 18 to 22 feet high between Woz Way and West Santa Clara Street. The eastern bank will be armored with gabions at the toe of slope and stone terraces on the slope. The river bottom will also be armored with a constructed low-flow channel. With completion of the Reach 3B improvements, the project site will no longer be susceptible to flooding. Upon completion of Reach 3B, the City could apply for a Letter of Map Revision (LOMR) to remove the FEMA Flood Hazard designation on the site. In fact, a conditional LOMR, based on the contracted work in progress could be requested prior to completion of the construction.

At West Santa Clara Street, stairs or ramps will be integrated into the stone terraces to provide access under the bridge.

When the flood-protection portion of construction is completed by November 2004, the project will feature underground passageways to carry floodwater away from the main stream, widened channels and streambed-erosion controls designed to protect hundreds of homes, schools and businesses from flooding

Storm Water Drainage

The annual average rainfall in San José is approximately 14 inches, although precipitation can vary greatly year-to-year. Ninety-eight percent of annual precipitation is received during the period from October through May. Storm runoff within the urbanized areas of San José,

[16] Vincent Stephens, Associate Engineer, Community Projects Review Unit, Santa Clara Valley Water District, May 2003.

is discharged into local storm drains which, in turn, flow to the creeks and ultimately to the Bay. The project site is virtually completely paved and drains to existing outfalls in Los Gatos Creek and the Guadalupe River. There are two existing storm outfalls on the site that drain to Los Gatos Creek and three outfalls that drain to the Guadalupe River.

Water Quality

Existing Regulatory Program

The Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) was developed in accordance with the requirements of the revised 1995 San Francisco Bay Basin Water Quality Control Plan, for the purpose of reducing water pollution associated with urban storm water runoff. The State Water Resources Control Board (SWRCB) administers the National Pollutant Discharge Elimination System (NPDES) General Permit for Construction Activity, which is intended to reduce construction-related stormwater pollution. The SWRCB NPDES General Permit for Construction Activity requires Stormwater Pollution Prevention Plans (SWPPPs) to control discharge associated with construction activities on sites of one acre or more.

In addition, the City of San José is a co-permittee to the Santa Clara Valley Urban Runoff Pollution Prevention Program's NPDES permit for municipal stormwater discharges, issued by the Regional Water Quality Control Board (RWQCB). The NPDES permit includes requirements for water quality monitoring, identification and elimination of illicit connections and illegal dumping to the storm drainage system, increased municipal storm drainage system, and street cleaning and public education programs.

The project will be required to submit a Notice of Intent (NOI) to the SWRCB (and to the San José Department of Public Works, if required) and prepare a SWPPP prior to construction. The project will be required to incorporate best management practices (BMPs), that may include structural and non-structural measures to minimize the addition of pollutants to the stormwater system. These may include first flush diversion; the use of open vegetated swales and natural depressions; stormwater detention structures; oil/water separators; porous pavement; or a combination of these practices, as well as other best management practices.

During construction of the project, the applicant will be required to attempt to eliminate non-stormwater discharges to stormwater systems; develop and implement a stormwater pollution prevention plan; and monitor discharges to stormwater systems.

The project site was originally developed prior to implementation of the NPDES regulatory program described above. Therefore, it is not expected that control measures have been implemented on the site to the extent that would be required of development today.

2. Impacts

Thresholds of Significance

For the purposes of this project, a drainage and water quality impact is considered significant if the project will:

- Violate any water quality standards or waste discharge requirements; or
- substantially deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level; or
- substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site; or
- substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; or
- create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provided substantial additional sources of polluted runoff; or
- otherwise substantially degrade water quality; or
- place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map; or
- place within a 100-year flood hazard areas structures which would impede or redirect flood flows; or
- expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of a failure or a levee or dam; or
- inundation by seiche, tsunami, or mudflow.

Flooding Impacts

The northern portion of the project site is currently designated as being within the 100- year flood zone of the Guadalupe River, Zone A0, with flood depths of one foot. A large flood control project, the Guadalupe River Park and Flood Protection Project is currently under construction adjacent to the project site. The project site is located within Reach 3B, which began construction in May 2002 and is scheduled to be completed in December 2004. With completion of Reach 3B, the project site will no longer be subject to flooding from the Guadalupe River. The site is also subject to sheet flow flooding of less than one foot to approximately two feet in depth from a commingling of flood waters from the Guadalupe River and Los Gatos Creek. The downtown Guadalupe River flood protection project is expected to reducing flooding of the site from the Guadalupe River, but it is unknown at this time exactly what benefit the Guadalupe River project will have on potential sources of flooding from Los Gatos Creek.[17] The project proposes to construct townhouses fronting Los Gatos Creek with finished floor elevations one foot above the 100-year flood elevation. Therefore, the project will conform to the requirements of San José's Flood Hazard

[17] Ibid.

Ordinance and the proposed buildings would not be subject to flood impacts. The proposed structure would not impede or redirect flood flows.

As proposed, the project would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of a failure or a levee or dam. The project site is not susceptible to inundation by seiche, tsunami, or mudflow.

- **The project will meet the requirements of the City's Flood Hazard Ordinance and will comply with all relevant FEMA regulations. Therefore, the project will not result in significant flooding impacts. (Less than Significant Impact)**

Storm Drainage Impacts

The project site is virtually completely paved under existing conditions. The project will develop the site with areas of landscaping and pervious surfaces, including riparian setbacks along Los Gatos Creek and the Guadalupe River. The area of impervious surfaces on the site will be reduced by the project, which will most likely result in a decrease in the amount of runoff produced by the site. The project would not substantially alter the existing drainage pattern of the site; nor will the project alter the course of any stream or river.

Since the site is currently producing nearly 100% runoff from stormwater, there is sufficient capacity in the existing storm drainage system to accommodate the future development, which will likely produce the same or less storm water runoff than the existing condition. The project would not contribute runoff water which would exceed the capacity of the existing stormwater drainage system. Future development on the site will be required to construct new on-site systems for collecting and managing storm water runoff. The project will use the existing outfalls in Los Gatos Creek and the Guadalupe River.

The project is required to comply with Provision C.3 of the City's NPDES Permit (No. CAS0299718). Under Provision C.3, no additional reduction in stormwater runoff volumes would be required. As proposed, development of the project site would reduce the amount of impervious surfaces; this would reduce the volume of stormwater runoff under post-development conditions, as compared to existing conditions. Further increases in the amount of stormwater to be infiltrated may not be recommended due to the relatively high groundwater levels (detected at 16.5 to 18 feet below ground surface) and because the site has been subject to contamination with hazardous materials as a result of historic industrial uses (refer to Section II, I, ***Hazardous Materials***). The site has undergone extensive testing, and the existing levels of contamination do not present any impacts to the proposed future uses on the site. Considering the historic presence of hazardous materials at the site, however, the extensive use of infiltration methods as a stormwater management technique would not be appropriate.

- **Future development on the site would most likely result in a net decrease in the volume of stormwater runoff from the site and would not impact the stormwater collection system within the project area. (Less than Significant Impact)**

Water Quality

While much of the site is currently developed as paved parking lots, redevelopment of the project site will result in increases in traffic, and more activity involving cars and people on the site and in the area, which could result in increases of both volume and pollutants for point and non-point source discharges. The project will most likely result in reduced water quality impacts as compared with existing conditions, because the project would convert the site from paved surface parking lots to a development in which virtually all parking would be covered and not subject to runoff. Furthermore, because the project includes substantial landscaping, the amount of pervious surfaces will increase, likely resulting in some level of detention, treatment and infiltration of runoff from the site. Runoff from future development may contain urban pollutants such as oils, grease, and metals that could impact water quality in local drainage systems receiving stormwater runoff. Future construction activities would generate dust, sediment, litter, oil, paint, and other pollutants that could contaminate runoff from the site. Ongoing activities associated with the future build-out of the site could contribute non-point source pollutant loadings, which could potentially result in adverse impacts to water quality in the stormwater system, the Guadalupe River, and South San Francisco Bay. Future development will be subject to the City's NPDES permit and the SWRCB General Permit for Construction Activity requirements to reduce or treat non-point source runoff. The project will comply with the NPDES permit by preparing a SWPPP and including Best Management Practices (BMPs) to minimize discharge of stormwater pollutants to the storm drain system, to the maximum extent practicable.

- **The proposed project would result in runoff that may contain urban pollutants such as oil, grease, metals, and herbicides, that could impact water quality in local drainage systems receiving stormwater runoff. (Significant Impact)**

3. Mitigation and Avoidance Measures

The following mitigation measures will be included in the project to conform to the current non-point source programs and to avoid or reduce hydrologic impacts to a less than significant level:

- Proposed development will comply with the NPDES permit issued to the City of San José and other co-permittees of the SCVURPPP, and will include measures to control pollutants discharged to the stormwater system. Future activities that require a permit from the City of San José will need to be evaluated for appropriate "best management practices" including, but not limited to the following:
  - stormwater retention or detention structures;
  - use of landscaped-based stormwater treatment measures, such as biofilters and vegetated swales to manage runoff from the site.
  - minimization of impervious surfaces and increased use of permeable pavement;
  - if inlet filters are used, a maintenance program to maintain the functional integrity of the systems;
  - damp sweeping of streets and on site parking lots;
  - routine storm drain cleaning; and
  - covering of dumpsters and materials handling areas

- Prior to commencement of any grading, clearing, or excavation, the project applicant would comply with the City of San José's Municipal Code and the SWRCB NPDES General Construction Activities Permit as follows:

    - The applicant shall develop, implement, and maintain a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP must specifically address Best Management Practices (BMPs) that will be included in the project to the maximum extent practicable, for both the construction and post construction periods. The SWPPP would include erosion and sediment control measures, waste disposal controls, post construction sediment, maintenance responsibilities, and non-stormwater management controls. The applicant shall maintain a copy of the most current SWPPP on site and shall provide a copy to any City representative or inspector on demand.

    - The applicant shall file a Notice of Intent (NOI) to be covered by the NPDES General Permit for Construction Activity with the State Water Resources Control Board (SWRCB) 30 days prior to any construction on the site.

- In addition, the SWPPP must include a description of erosion control practices, which may include BMPs as specified in the California Storm Water Best Management Practice Handbook for reducing impacts on the City's storm drainage system from construction activities.

- The project will conform with the City's Grading Ordinance during construction. Prior to issuance of a grading permit, the applicant shall submit copies of the NOI and Erosion Control Plan (if required) to the City Project Engineer, Department of Public Works.

Conclusion: Implementation of the above mitigation measures will reduce the project's drainage and water quality impacts to a less than significant level. **(Less than Significant Impact with Mitigation)**

D. BIOLOGICAL RESOURCES

The following discussion is based on a biological assessment prepared by *H.T. Harvey & Associates* in April 2002, that is reproduced in Appendix D of this EIR.

1. Existing Setting

Biotic Resources on the Project Site

The project site is completely developed and no natural biotic habitats have been identified on-site. There is, however, some landscape vegetation on the site. Mixed riparian forest habitat occurs adjacent to the west boundary of the project site, forming the riparian corridor of Los Gatos Creek. All vegetation along the Guadalupe River (that forms the east boundary of the site) has been removed as a part of the Guadalupe River Park Flood Protection Project. The reach of the Guadalupe River adjacent to the site is currently under construction for a major flood control project. All vegetation has been removed from the channel; therefore, project construction is not expected to impact that riparian corridor.

Ordinance Trees

The City of San Jose tree ordinance (San Jose City Code, sections 13.31.010 to 13.32.100) was adopted to protect all trees having a trunk that measures 56 inches or more in circumference (18 inches in diameter) at the height of 24 inches above the natural grade of the slope. The ordinance protects both native and non-native species.

Based on a site survey, there does not appear to be any ordinance-sized trees on the project site. While numerous trees within the adjacent Los Gatos Creek corridor can be classified as ordinance trees, the project does not propose any residential or commercial development within 50 feet of the riparian corridor.

Developed Habitat

The San Jose Water Company facility, a single family home, and the existing parking lots comprise approximately 95 percent of the project site. The only vegetation found on-site is ornamental; this includes turf grass, various shrubs and hedges, fencerows overgrown with English Ivy (*Hedera helix*), and German ivy (*Senecio mikanioides*), and trees such as magnolia (*Magnolia* sp.), tree-of-heaven (*Ailanthus altissima*), and oriental planetree (*Platanus orientalis*). The parking lots and buildings on site are relatively well maintained and, therefore, there is no ruderal habitat[18] on site.

Developed habitats can support a variety of wildlife species, depending on the amount and type of vegetation present and the availability of food. On the project site, pavement provides little habitat for wildlife, but wildlife species common and well adapted to urban areas include the European Starling (*Sturnus vulgaris*), the Rock Dove (*Columba livia*), and the House Sparrow (*Passer domesticus*). Mammals that occur in developed habitats tend to

[18] Vegetation containing mostly introduced, weedy herbaceous species. Common in disturbed areas, along roadsides or vacant lots.

be introduced species, such as the house mouse (*Mus musculus*), the black rat (*Rattus rattus*), the Norway rat (*Rattus norvegicus*), and the Virginia opossum (*Didelphis viginianus*).

Riparian Habitat (off-site)

Degraded mixed riparian habitat exists along the Los Gatos Creek that runs adjacent to the project site. As noted above, all vegetation on the bed and banks of the Guadalupe River was removed as part of the Army Corps of Engineers (Corps) flood control project. The Los Gatos Creek habitat is dominated by mature Fremont cottonwoods (*Populus fremontii* ssp. *fremontii*), with a variety of other tree species including box elder (*Acer negundo*), red willow (*Salix laevigata*), and California pepper tree (*Schinus molle*) forming lower canopies. The herbaceous understory is dominated by Himalayan blackberry (*Rubus discolor*), smilo grass (*Piptatherum milliaceum*), fumitory (*Fumaria officinalis*) and pellitory (*Parietaria judaica*) and other ruderal species associated with urban riparian corridors.

Due to dense overstory canopy, little to no herbaceous vegetation exists within the aquatic habitat of Los Gatos Creek in the vicinity of the project site. The banks forming the riparian corridor are steep and have few shelves along the aquatic habitat to support wetland vegetation. Vegetation that has become established along the creek or in eddies includes red willow, watercress (*Rorippa nasturtium-aquatica*), yellow nutsedge (*Cyperus esculentus*), and Himalayan blackberry.

The canopies along Los Gatos Creek cast dense shade over the aquatic habitat throughout most of the day. The State Route 87 overpass, which borders the eastern corner of the site, also casts significant shade along the Guadalupe River. The banks of Los Gatos Creek are somewhat gradual, though historical retaining walls remain in place along some portions of the creek. The parking lot adjacent to Los Gatos Creek was built between two and five feet from the top-of-bank. Storm drain flap gates, and storm drain outfalls empty from the adjacent parking lots into both riparian corridors.

Wildlife found within this riparian habitat is comprised of species most tolerant of disturbed habitats and human activities. Western toads (*Bufo boreas*), western fence lizards, and common garter snakes (*Thamnophis sirtalis*) may occur in this habitat. Birds that nest or roost in the disturbed riparian vegetation, such as the California Towhee (*Pipilo crissalis*), Mourning Dove, House Finch, Lesser Goldfinch, and Western Scrub-jay (*Aphelocoma californica*), also forage within these habitats. Mammals expected to occur include the house mouse, Norway rat, roof rat, broad-footed mole (*Scapanus latimanus*), Botta's pocket gopher (*Thomomys bottae*), Virginia opossum, raccoon (*Procyon lotor*), and the house cat (*Felis catus*). Known anadromous populations of the steelhead rainbow trout (*Oncorhynchus mykiss*) occur in nearby Los Gatos Creek and Guadalupe River throughout the year and Chinook salmon (*Oncorhynchus tshawytscha*) migrate through these streams and may spawn in the proximity of the project area.

Special-Status Species

Reconnaissance-level surveys were conducted on the project site and database searches were conducted for the project vicinity (including the riparian corridors) to identify potential special-status plant species that could occur in the project area. Nine special-status plant species were identified in these queries, however, the surveys determined that none of these

plant species could occur on the project site. Furthermore, the riparian habitats adjacent to the site are too disturbed to support any of the identified special-status plant species.

Table 1 lists all known and potential special status plant and animal species expected to occur in the vicinity of the project site. Based on available information and an on-site survey, there is a high probability that at least six specific special status animal species listed on Table 1 are present or could occur in the project vicinity (no special-status animal species occur directly on the project site). The six species are: steelhead rainbow trout, fall-run Chinook salmon, the sharp-shinned hawk, the Cooper's hawk, the Vaux's swift, and the California yellow warbler. The following paragraphs discuss the potential for these six species to occur on the project site. The other species noted in Table 1 are assumed absent from the site and, therefore, are not discussed below.

The Steelhead Rainbow Trout (*Oncorhynchus mykiss)* is an anadromous form of rainbow trout (i.e., migrates upstream from the ocean/bay to spawn) that is federally listed as a threatened species. Young steelhead usually remain in freshwater stream one or two years before migrating to the ocean. Steelhead trout are generally found in clear, cool, perennial sections of relatively undisturbed streams. Preferred streams typically support dense canopy cover but are usually free of rooted or aquatic vegetation. Gravel substrates are the optimum spawning habitat for these trout. Steelhead usually cannot survive long in pools or streams with water temperatures above 70°F for juveniles and adults, and above 58°F for developing embryos. Steelhead rainbow trout are known to be present in the Guadalupe River and spawn in Los Gatos Creek. Spawning habitat for this species occurs only in the upper reaches of the watershed, however, and this species is not expected to spawn adjacent to, or downstream from, the project site. The flood control project along the project reach of the Guadalupe River has removed all vegetation and thus, removed all shading once provided by the overhanging vegetation. The resulting increase in water temperature has reduced the overall habitat quality for steelhead in the vicinity of the project site.

The Fall-run Chinook Salmon (*Oncorhynchus tshawytscha*) is an anadromous species that is listed as a federal candidate species. Adults spawn in gravel beds in the upper reaches of streams, and juveniles migrate downstream to the ocean, where they mature. Small numbers of fall-run Chinook typically arrive in south San Francisco Bay streams in October and November, although on rare occasions, adult Chinook have been detected in these streams in summer, and spawning has been observed in early September and as late as December. In recent years, Chinook salmon have regularly spawned in the Guadalupe River watershed and they may spawn within areas adjacent to the project site or downstream of this site. However, the major flood control project along this reach of the Guadalupe River has removed all shading once provided by trees and overhanging vegetation, and removed the spawning habitat in the vicinity of the project site. Therefore, it is presumed absent.

The Sharp-Shinned Hawk (*Accipiter striatus*) is a medium-sized hawk that preys on other bird species and is listed as a California species of special concern. Sharp-shinned hawks nest in woodlands, but forage in many habitats in winter and during migration, including urban areas. Sharp-shinned hawks are known to forage near the project site during migration. The project site and adjacent riparian habitat are not sufficient for nesting by this species.

Table 1
Special Status Plant and Animal Species and Their Occurrence on the Project Site

Species	Status*	Habitat	Occurrence on Site
Federal or State Endangered or Threatened Species			
Steelhead Rainbow Trout	FT	Cool streams with suitable spawning habitat and conditions allowing migration	Known to be present in Guadalupe River and Los Gatos Creek including the reaches adjacent to the project alignment. Spawning habitat is present upstream from the project site, but juvenile steelhead may occur throughout the year in both drainages adjacent to the site. The flood control project along the project reach of the Guadalupe has removed all vegetation and, thus all shading. The resulting increase in water temperature has reduced the overall habitat quality in the project vicinity. Species is not expected to spawn on or downstream from the site.
California Red-legged Frog	FT, CSSC	Streams, freshwater pools and ponds with overhanging vegetation	Recorded historically from this reach of Guadalupe River, but no records in several decades. Due to marginal-quality riparian vegetation, disturbance, and the presence of predatory fish, bullfrogs, and crayfishes, this species is not expected to breed near the site or to occur there; presumed absent.
American Peregrine Falcon	SE, SP	Forages in many habitats; requires cliffs for nesting.	Suitable breeding habitat absent from site. Possibly a rare forager during winter and migration, although expected to use the site rarely.
Willow Flycatcher	FE, SE	Breeds locally in riparian habitats in mountains and southern deserts.	Potentially suitable foraging habitat for migrants present on-site. Any occurring on site are probably not of the listed races.
Federal or State Proposed Endangered or Threatened Species or Candidate Species			
Fall-run Chinook Salmon	FC	Cool streams that reach the ocean and that have shallow, partly shaded pools, riffles, and runs.	Not known to spawn in the South S.F. Bay historically, but small numbers of fall-run Chinook are present in Guadalupe River, primarily in fall and winter but occasionally in summer. Spawning habitat in the Guadalupe River is not present immediately adjacent to the site. Spawning habitat, may be present in Los Gatos Creek immediately adjacent to the site and in the Guadalupe River either upstream or downstream from the site, where the flood control project transitions to natural stream bed.
California Species of Special Concern			
Western Pond Turtle	CSSC	Permanent or nearly permanent water in a variety of habitats.	Known to be present in Guadalupe River, but disturbance along adjacent reaches and in the upland portions of the site, as well as intensive urbanization of the surroundings, precludes the presence of a viable breeding population. Presumed absent.
Sharp-shinned Hawk	CSSC	Nests in woodlands, forages in many habitats in winter and migration.	Migrant and winter visitor. Not expected to breed on site.
Cooper's Hawk	CSSC	Nests in woodlands, forages in many habitats in winter and migration.	Potentially suitable breeding habitat present in larger trees adjacent to the project site.

Ferruginous Hawk	CSSC	Forages in grasslands and occasionally in other open habitats during migration and winter.	No suitable breeding or foraging habitat on-site. Presumed absent.
Golden Eagle	CSSC	Breeds on cliffs or in large trees or electrical towers, forages in open areas.	No suitable breeding or foraging habitat on-site. Presumed absent.
Merlin	CSSC	Uses many habitats in winter and migration.	Migrant and unlikely winter visitor. Does not nest in California. Presumed absent.
Prairie Falcon	CSSC	Nests on cliffs, forages in open areas.	No suitable breeding or foraging habitat on site. Presumed absent.
Burrowing Owl	CSSC	Flat grasslands and ruderal habitats.	No potential nesting habitat and not known to be present in site vicinity. Presumed absent.
Vaux's Swift	CSSC	Nests in snags in coastal coniferous forests or, occasionally, in chimneys; forages aerially.	Forages over Guadalupe River during migration and the breeding season. No suitable nesting habitat on the site. Presumed absent.
Loggerhead Shrike	CSSC	Nests in tall shrubs and dense trees, forages in grasslands, marshes, and ruderal habitats.	Possibly an occasional dispersant or migrant. Site is not expected to provide adequate foraging habitat and therefore, this species is not expected to breed on the site.
California Yellow Warbler	CSSC	Breeds in riparian woodlands, particularly those dominated by willows and cottonwoods.	Riparian habitat near the site not of sufficient quality for nesting by this species. Forages near site during migration. Site not sufficient for nesting. Presumed absent.
Townsend's Big-eared Bat	CSSC	Roosts in caves and mine tunnels in a variety of habitats.	No records in the area and no habitat present in the area. Presumed absent.
California Mastiff Bat	CSSC	Forages over many habitats; requires tall cliffs or buildings for roosting sites.	No records for Santa Clara County and no roosting habitat in the area. Presumed absent.
Pallid Bat	CSSC	Forages over many habitats; roosts in buildings, rocky outcrops and rocky crevices in mines and caves.	The closest known maternity colony is over 5 miles from the project site. No suitable foraging habitat on or near the project area. Presumed absent.

***Special Status Species Code Designations**

FE - Federally listed Endangered
FT - Federally listed Threatened
SE - State listed Endangered
ST - State listed Threatened
FC - Federal Candidate. Sufficient biological information to support a proposal to list the species as Endangered or Threatened
CSSC - California Species of Special Concern
SP - State Protected Species

CNPS 1A - Plants presumed by CNPS to be extinct in California
CNPS 1B - Plants considered by CNPS to be rare, threatened, or endangered in California, and elsewhere
CNPS 4 - Plants of limited distribution - a watch list

The Cooper's Hawk (*Accipiter cooperii*) is a medium-sized hawk that preys on a variety of bird species and occasionally takes small mammals and reptiles and is listed as a California species of special concern. Breeding pairs in California usually select nest sites within dense stands of live oak woodland, riparian habitats, or other wooded areas. Pairs may also nest in sparsely wooded areas and, especially in recent decades, nesting pairs have been found breeding in suburban areas and parks in the San Francisco Bay area and elsewhere. Cooper's Hawks have been recorded breeding in several locations on the northern Santa Clara Valley floor. Although the riparian areas adjacent to the project site are impacted by nearby traffic noise, the tallest trees in the adjacent Los Gatos Creek corridor provides potentially suitable nesting sites. Therefore, this species could potentially breed adjacent to the project site.

The Vaux's Swift (*Chaetura vauxi*) is a small insectivore that nests in snags in coastal coniferous forests (and occasionally chimneys) and is listed as a California species of special concern. The Vaux's swift is known to forage over Guadalupe River during migration and during the breeding season. However, the project site and adjacent riparian habitat are not sufficient for nesting by this species.

The California Yellow Warbler (*Dendroica petechia brewsteri*) is an insectivore that is found primarily in deciduous riparian habitats and is listed as a California species of special concern. Yellow warblers migrate mostly to Central and South America in the fall and return to California to breed in April. Yellow warblers are known to forage near the project site during migration. The project site and adjacent riparian habitat are not sufficient for nesting by this species.

2. Impacts

Thresholds of Significance

For the purposes of this project, impacts to vegetation and wildlife are considered significant if the project would:

- have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations;
- have a substantial adverse effect on any riparian habitat or other sensitive natural communities identified in local or regional plans, policies, or regulations;
- have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to marsh, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Impacts from Proposed Project Development

Impacts to Developed Habitat

Development proposed by the project would not directly impact viable habitat on the project site, since the property is completely developed and paved. The proposed project will consist of several buildings and associated infrastructure, as well as ornamental vegetation. The wildlife species that are currently found on-site are expected to utilize the proposed new development as well. Therefore, conversion of the SJW facility, single family residence, and parking lots to a mixed-use development would not have a significant impact.

- **Development of the proposed project would have a less than significant impact on species that occur or forage within the existing developed habitat. (Less Than Significant Impact)**

Impacts Riparian Habitat (off-site)

As discussed in the City of San José's Riparian Corridor Policy Study, riparian habitat values can be reduced when buildings, impervious surfaces, and landscaped area are located directly adjacent to riparian corridors. Direct and indirect impacts can include: 1) disturbance to wildlife breeding and/or foraging due to excessive noise and/or night lighting, 2) loss of adjacent upland or edge habitat, and 3) introduction of non-native plant and animal species.

The project site is completely developed and paved up to the edge of the riparian corridor, so the project would not result in a loss of upland or edge habitat. The project includes a minimum 50-foot setback, measured from the top of bank, from the Los Gatos Creek and Guadalupe River channels, so the project would not result in the introduction of non-native plant or animal species into the riparian corridors.

It is generally desirable to minimize human activities adjacent to riparian habitats since the close proximity of human activity and the placement of structures adversely affect wildlife use within riparian corridors. Riparian corridor setbacks are the principle means of minimizing impacts associated with human activities. The City of San José's Riparian Corridor Policy generally requires that new developments be set back 100 feet from the edge of the riparian corridors. These setbacks are typically measured from the top of bank or edge of the riparian corridor, whichever is closer. However, the Riparian Policy provides for setback exceptions for "locations in or near downtown San Jose and urban infill projects." The minimum setback distance allowed under this exception is "no less than 30 feet." In the case of the project, the Guadalupe River frontage has no vegetation, so the top of bank is conterminous with the edge of the riparian corridor; for Los Gatos Creek, the vegetation does not extend past the top of bank, so the top of its bank is also conterminous with the edge of the riparian corridor. Based on the existing biological conditions of the riparian corridors adjacent to the site (edge of the corridor is the top of bank, because riparian vegetation does not hang over the top of bank) and the urban land use on both sides of these waterways, the proposed minimum 50-foot setback for buildings and active use areas is considered sufficient by the EIR biologist to protect sensitive species and buffer the habitat from impacts resulting from the operation of the proposed project.

The project proposes a minimum 50-foot setback from the Los Gatos and Guadalupe River channels. The minimum 50-foot setback area of Los Gatos Creek and Guadalupe River will

be divided into three zones, as follows: within 10 feet of the top-of-bank, the setback will be densely planted with locally native trees and shrubs. Public access will be prohibited within the 10-foot setback area, with the exception of emergency and maintenance vehicle access. The Santa Clara Valley Water District will have an access easement within a 30-foot setback, measured from the top-of-bank. Between the 10-foot and 50-foot setback, there will be a parks/open space easement that will include the pedestrian trail, landscaping, and seating areas. The proposed pedestrian trail will be 12-feet wide with 2-foot shoulders on each side. A cross-section of the proposed setback zones is shown on Figure 6. Where practicable, the pedestrian path will be constructed of pervious materials.

The proposed project would include construction of multi-story office buildings and parking structures, and associated lighting. Los Gatos Creek is deeply incised in the project reach. The shape of the channel would prevent any exterior lighting from the project site from shining on the water, unless it was aimed directly into the creek. Cars will be parked within parking structures that will have half walls on each level. This will prevent headlights from shining directly into the riparian corridor. As a result, the addition of artificial light will have no adverse affect on wildlife species that may use the aquatic habitat. The western (residential) portion of the project will shade about one-half of the Los Gatos Creek channel along the project frontage during the morning hours (refer to Figures 27 and 28 in Section II, J, ***Aesthetics and Shading***). This amount and duration of shadow will not adversely affect the riparian vegetation or wildlife species within the Los Gatos Creek channel. On the contrary, some shading is considered a benefit to the riparian corridor, since it will keep the creek water temperature cool. The riparian corridor will get sufficient sunlight in the midday and afternoon period to continue to thrive. Therefore, the effect of the proposed development on wildlife species in the riparian corridor would be less than significant.

- **Operation of the proposed project would not significantly impact the riparian corridors with inclusion of the proposed minimum 50-foot riparian setback. (Less Than Significant Impact)**

Impacts from Project Construction

Impacts to Water Quality

See previous discussion under water quality in Section II, C., ***Drainage and Water Quality.***

Impacts to Nesting Raptors

Several raptors, including a special-status species, the Cooper's Hawk, have been observed in the general vicinity of the project site and may breed in the Los Gatos Creek channel adjacent to the site. Nesting raptors (i.e., nesting of falcons, hawks, eagles, or owls) are protected under provisions of the Migratory Bird Treaty Act and California Department of Fish and Game (CDFG) code Sections 3503, 3503.5, and 2800. Demolition and construction disturbance near raptor nests can result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes abandonment and/or loss of reproductive effort is considered a taking by the CDFG. Any loss of fertile eggs, nesting raptors, or any activities resulting in nest abandonment would constitute a significant impact.

- **If breeding raptors are present, demolition and construction activities during the nesting season may result in the disturbance or destruction of nearby breeding raptors or their nests. (Significant Impact)**

3. Mitigation and Avoidance Measures for Vegetation and Wildlife Impacts

Mitigation and Avoidance Measures Proposed by the Project

The following mitigation and avoidance measures are included as part of the project to reduce or avoid potential impacts to biological resources:

- Only buildings and landscape areas shall front the riparian setback areas; entrance roads and parking lots shall not be constructed adjacent to the setback zones; the exception would be for emergency vehicle access and/or access for maintenance vehicle use, both of which would not require regular use by vehicles. Pedestrian walkways shall be allowed within the proposed setbacks for both streams; walkways will be no closer than 10 feet from the top of bank. The 10-foot setback shall be densely planted with locally native tress and shrubs and will be designed and constructed in a manner that minimizes the creation of impervious surfaces.

- Public access should be restricted from the riparian corridor; physical barriers should include either chain-link fence or other suitable, more decorative structures, like split rail or iron fencing that are effective at restricting access. Informational signs explaining the sensitivity of riparian corridors should be posted, particularly near potentially suitable access points.

- The entire 50-foot setback area shall be planted with locally native shrubs and trees compatible with the adjacent riparian corridor. The 10-foot setback from the top of bank will be densely planted with locally native trees and shrubs. The planting of native species within the setback area would protect and enhance the adjacent riparian corridors. Species that could be planted include locally native willows and oaks. Invasive, exotic species should not be used in the landscaping within or adjacent to the riparian corridor or setback area.

- Lighting adjacent to and within the setback zone shall be minimized to the extent practicable and shall incorporate indirect and focused lighting away from the riparian areas.

- Excess surface runoff from parking lots, entrance roads and building roof tops shall not be allowed to enter the streams without some form of pre-treatment (e.g., grease traps, grassy swales, planted stormwater retention/detention basins). Operation and maintenance of facilities shall include vector control measures. Any proposed infiltration devices shall be reviewed by both the City and SCVWD.

- No new outfalls will be constructed as part of site development plans; existing outfalls will be utilized in their existing design configuration.

- Fertilizers and pesticides used within landscape portions of the site shall be applied in a manner that prevents drift of airborne chemicals into the riparian zone/creek and prevents surface runoff and subsurface flow into the creeks, to the extent feasible.

- Site development shall not involve the removal or trimming of existing riparian trees and shrubs along the Los Gatos Creek, except in the context of required maintenance. Any trimming or removal of riparian canopy will occur under the direction of a certified arborist or qualified biologist and shall not commence without first contacting the California Department of Fish and Game.

- No grading shall occur at the top-of-bank or within the bed, bank or channels of the streams.

- The project will comply with the City of San José Grading Ordinance, including erosion and dust control during site preparation and with the City of San José Zoning Ordinance requirements for keeping adjacent streets free of dirt and mud during construction. The following specific measures would be implemented to prevent stormwater pollution and minimize potential sedimentation during construction.

    - restricting grading to the dry season or meet other City requirements;
    - use silt fencing to retain sediment on the project site;
    - providing temporary cover of disturbed surfaces to help control erosion during construction;
    - provide permanent cover to stabilize the disturbed surfaces after construction has been completed.

- The project would be required to comply with the NPDES General Construction Activity Storm Water Permit issued by the SWRCB. Prior to construction grading, the applicant will file a "Notice of Intent" (NOI) to comply with the General Permit and prepare a Storm Water Pollutant Prevention Plan (SWPPP) which addresses measures that would be included in the project to minimize and control construction and post-construction runoff. A copy of the SWPPP will be submitted to the City of San José Department of Public Works.

- The project will include post-construction structural controls where feasible, and Best Management Practices (BMPs) for reducing contamination in stormwater runoff as permanent features of the project.

- Preconstruction surveys for nesting raptors should be conducted between September and January by a qualified ornithologist or wildlife biologist to ensure that no raptor nests will be disturbed during demolition and construction activities. The survey shall be conducted no more than 14 days prior to initiation of demolition/construction activities during the early part of the breeding season (January to April) and no more than 30 days prior to initiation of these activities during the late part of the breeding season (May to August). During the survey, the ornithologist/biologist will inspect all trees and other likely habitat in and immediately adjacent to the impact areas for raptor nests. The surveys will be conducted from the project (east) side of the Los Gatos Creek channel and, if necessary, access into the channel would be obtained from the Santa Clara Valley

Water District. If an active raptor nest is found close enough to the demolition/ construction area to be disturbed, the ornithologist/biologist (in conjunction with the California Department of Fish and Game) will determine the extent of a construction-free buffer zone to be established around the nest.

Conclusion: Implementation of the proposed mitigation measures would reduce biological impacts to a less than significant level. **(Less than Significant Impact with Mitigation)**

E. TRANSPORTATION

The following discussion of transportation is based upon a traffic analysis prepared for the project by *Hexagon Transportation Consultants, Inc.* A copy of the traffic analysis is provided in Appendix E of this EIR. The purpose of the traffic analysis was to identify the potential traffic impacts of the proposed mixed use development, according to the standards and methodologies of the City of San José and the Santa Clara Valley Transportation Authority (VTA). The VTA administers the County Congestion Management Program (CMP).

The traffic analysis evaluated 32 signalized intersections and 14 directional freeway segments in the vicinity of the project site. The 13 CMP intersections were evaluated against the standards of both the City of San José and the County CMP. The specific intersections and freeway segments analyzed are identified below. The study intersections are shown on Figure 12.

Study Intersections

SR 87 and Julian Street (E)*
SR 87 and Julian Street (W)*
SR 87 and Santa Clara Street*
I-280 and Bird Avenue (N)*
I-280 and Bird Avenue (S)*
The Alameda and Hedding Street*
The Alameda and Naglee Avenue*
The Alameda and Race Street*
Almaden Boulevard and San Carlos Street*
Autumn Street and Santa Clara Street*
Bird Avenue and San Carlos Street*
Market Street and San Carlos Street*
Montgomery Street and Santa Clara Street*
Almaden Boulevard and Park Avenue
Almaden Boulevard and San Fernando Street
Autumn Street and Julian Street
Autumn Street and San Fernando Street
Auzerais Avenue and Bird Avenue
Auzerais Avenue and Delmas Avenue
Bascom Avenue and San Carlos Street
Bird Avenue and Virginia Street
Delmas Avenue/Southbound SR 87 Off-Ramp and Park Avenue
Delmas Avenue and San Carlos Street
First Street and Reed Street
Lincoln Avenue and San Carlos Street
Meridian Avenue and San Carlos Street
Montgomery Street and Park Avenue
Montgomery Street and San Fernando Street
Park Avenue and Woz Way/ Northbound SR 87 On-Ramp
Woz Way and San Carlos Street

Delmas Avenue and San Fernando Street (presently unsignalized)
Delmas Avenue and Santa Clara Street (presently unsignalized)

CMP intersections are denoted with an asterisk (*).

Traffic conditions at the intersections were analyzed for the typical weekday AM and PM peak hour of traffic. Although the precise time of the peak hour varies somewhat from day to day and from one location to another, the AM peak hour typically occurs between 7:00 and 9:00 AM, and the PM peak hour typically occurs between 4:00 and 6:00 PM. It is during these periods that the highest traffic volumes and the most congested traffic conditions occur on an average day.

The project site is located in close proximity to the HP Pavilion. Preceding and following HP Pavilion events, usage of study area roadways is unusually high with congestion not experienced during an average day. During these peak periods of HP Pavilion traffic, special traffic control measures are implemented including turn restrictions and the use of traffic control officers. The City of San Jose's level of service standards do not apply to traffic conditions during these special events. Potential project impacts are identified based on traffic conditions that occur on an average day without a special event.

The following freeway segments were analyzed in order to identify the potential impacts of the proposed development.

Study Freeway Segments

SR 87 northbound between Alma Avenue and I-280
SR 87 southbound between Alma Avenue and I-280
SR 87 northbound between I-280 and Julian Street
SR 87 southbound between I-280 and Julian Street
SR 87 northbound between Julian Street and Coleman Avenue
SR 87 southbound between Julian Street and Coleman Avenue
I-280 northbound between I-880 and Meridian Avenue
I-280 southbound between I-880 and Meridian Avenue
I-280 northbound between Meridian Avenue and Bird Avenue
I-280 southbound between Meridian Avenue and Bird Avenue
I-280 northbound between Bird Avenue and SR 87
I-280 southbound between Bird Avenue and SR 87
I-280 northbound between SR 87 and Tenth Street
I-280 southbound between SR 87 and Tenth Street

The analysis of potential project impacts on the study freeway segments was conducted based on the existing peak-hour traffic volumes and the estimated number of peak-hour project trips on weekdays.

Traffic conditions were evaluated for the following scenarios:

Existing Conditions: Existing traffic volumes were obtained from recent traffic counts.

Background Conditions: Background conditions were represented by future background traffic volumes on the near-term future roadway network. Background traffic volumes were estimated by adding to existing peak-hour volumes the projected volumes from approved but not yet completed developments. The latter component is contained in the City of San Jose Approved Trips Inventory (ATI). This scenario includes the recently approved CIM project, a downtown mixed-use project consisting of high-rise condominiums over ground floor retail uses, located in the Block 3, Zanottos, and Fountain Alley parking lots.

Project Conditions: Project conditions were represented by future traffic volumes, with the project, on the near-term future roadway network including project-sponsored transportation improvements. Future traffic volumes with the project (hereafter called project traffic volumes) were estimated by adding to background traffic volumes the additional traffic generated by the project. Project conditions were evaluated relative to background conditions in order to determine potential project impacts.

Cumulative Conditions. Traffic volumes under cumulative conditions were estimated by applying a growth factor to existing volumes, adding trips from approved developments, and adding project trips. This scenario is described and evaluated in Section V, ***Cumulative Impacts***, of this EIR.

1. Existing Setting

Existing Roadway Network

Regional access to the project site is provided via Interstate 280 (I-280) and State Route (SR) 87. These facilities are described below. The existing roadway network is shown on Figure 12.

I-280 extends from US 101 in San Jose to I-80 in San Francisco. It is generally an eight-lane freeway in the vicinity of downtown San Jose. It also has auxiliary lanes between some interchanges. The section of I-280 just north of the Bascom Avenue over-crossing has six mixed-flow lanes and two high-occupancy-vehicle (HOV) lanes. Access to the project site to and from I-280 is provided via a full interchange at Bird Avenue. Project access from I-280 is also available indirectly via an interchange with SR 87.

SR 87 is a four-lane freeway that is aligned in a north-south orientation. SR 87 begins at its interchange with SR 85 and extends northward to US 101. SR 87 is currently being upgraded to a grade-separated freeway between Julian Street and US 101. At its completion, full interchanges will be provided at Taylor Street and Skyport Boulevard. Access to the project site is provided by a full interchange at Julian Street and partial interchanges at Santa Clara Street (NB off ramp), Park Avenue (SB off ramp and NB on ramp), and Auzerais Avenue (SB on ramp).

Local access to the site is provided by the following roadways:

West Santa Clara Street is a four-lane east-west roadway adjacent to the northern boundary of the project site. East of US 101, Santa Clara Street becomes Alum Rock Avenue and west of Autumn Street it becomes The Alameda. As currently proposed, the project will not include any driveways on West Santa Clara Street.

The Alameda is generally a four-lane north-south arterial that runs from Santa Clara University to the downtown San Jose area (HP Pavilion), where it becomes West Santa Clara Street.

Delmas Avenue runs through and bisects the project site north to south. The segment between San Fernando Street and Santa Clara Street serves two-way traffic. It is a one-way (southbound) street south of San Fernando Street. Currently, Delmas Avenue has only one travel lane with on-street parking on the segment between San Fernando Street and Park Avenue. Between Park Avenue and San Carlos Street, Delmas Avenue widens to a two-lane street. At Auzerais Avenue, Delmas Avenue provides direct access to southbound SR 87. Delmas Avenue will provide full access to the proposed developments on both sides of the street.

San Fernando Street is a two-lane east-west roadway that will provide limited service access to the proposed commercial space, east of Delmas Avenue. San Fernando Street extends from the San Jose Diridon Station through downtown San Jose.

Julian Street is primarily a one-way westbound two-lane roadway within the downtown core. West and east of the downtown core at SR 87 and 17th Street, respectively, Julian Street is generally a two-way two-lane facility. Julian Street has a full interchange with SR 87.

Almaden Boulevard is a six-lane north-south roadway that runs from Julian Street to I-280. South of I-280, Almaden Boulevard provides access to and from the south via its connections to the one-way couplet of Vine Street and Almaden Avenue. At Santa Clara Street, Almaden Boulevard splits into a pair of one-way streets: Notre Dame Street (northbound) and North Almaden Boulevard (southbound), which extend to the SR 87 interchange at Julian Street.

Bird Avenue is a four-lane north-south arterial that provides access to I-280 and the downtown area. Bird Avenue extends from the Willow Glen area of San Jose to Park Avenue, where it splits into a pair of one-way streets—Montgomery Street and Autumn Street.

Montgomery Street is one-way (southbound) street that runs between Santa Clara Street and Park Avenue, south of which it becomes Bird Avenue.

Autumn Street is a one-way (northbound) street between Santa Clara Street and Park Avenue. North of Santa Clara Street, it becomes a two-way arterial that extends northward to Julian Street.

San Carlos Street is a four-lane east-west arterial that runs through downtown San Jose to I-880, where it becomes Stevens Creek Boulevard.

Existing Bicycle and Pedestrian Facilities

The Guadalupe River Trail extends from Discovery Meadow at Woz Way to the Arena Green located adjacent to the HP Pavilion. This paved trail is a Class I Bikeway that is shared with pedestrians and completely separated from motor vehicle traffic. Adjacent the project site, the trail is located on the east bank of the Guadalupe River.

None of the streets within the downtown include bike lanes but many have sufficient curb lane width to accommodate bicycles.

Many streets within the downtown, including those in the project area have sufficient curb lane width to accommodate bicycles.

Pedestrian facilities in the study area include sidewalks, pedestrian push buttons and signal heads at intersections. Sidewalks are found along all of the previously described local roadways in the study area and along the streets and collectors near the project site.

The City General Plan includes a planned trail along Los Gatos Creek, which forms the western edge of the site. According to the City of San José, Parks, Recreation, and Neighborhood Services park planning staff, the trail alignment will be along the project frontage of the creek. A 40-foot wide trail easement is proposed that will include a minimum 12-foot wide paved trail with two to four foot buffers on either side of the trail.[19] The creek trail will be a recreational and aesthetic amenity, as well as provide pedestrian and bicycle access between the Vasona Corridor LRT station south of the site and Santa Clara Street and the Pavilion north of the site.

Existing Transit Service

Existing transit services to the study area are provided by VTA and CalTrain. These are described below. The bus routes, light rail and CalTrain lines that provide direct access to the project site are shown in Figure 13.

Bus Service

The downtown area is served directly by several local buses. Access to the downtown core from outside its boundaries is provided via 20 bus lines. The bus lines that operate closest to the project site are listed below, along with their terminus points and commute hour headways.

VTA also provides a shuttle service near the project area. The downtown shuttle bus, DASH, provides shuttle service from the San Jose Diridon CalTrain station to the Paseo De San Antonio and Convention Center LRT stations via San Fernando Street and West San Carlos Street.

The bus stop nearest the project site is located on Santa Clara Street, west of Delmas Avenue.

[19] Brad Brown, Park Planner, written correspondence, July 16, 2002.

Downtown Area Bus Lines

Bus Lines	Route Description	Commute Hour Headways
22	Eastridge to Palo Alto/Menlo Park Caltrain Station	10-20
23	Downtown San Jose to San Antonio Shopping Center	30
24	Downtown San Jose to California Ave. Caltrain Station	30
63	San Jose State University to Almaden Valley	20
64	Almaden LRT Station to Alum Rock & Miguelito	15
65	Almaden LRT Station to San Jose State University	30
68	San Jose Diridon Station to Gilroy/Gavilan College	15
81	Vallco Fashion Park to East San Jose	15-30
85	Lawrence Expwy. & Moorpark to 10th & Hedding	30
300	East San Jose to Stanford University	20-30
305	Santa Teresa LRT Station to Mountain View Caltrain Station	60

Source: VTA Bus and Rail Map, January 2001

Light Rail Transit (LRT) Service

The Guadalupe Corridor LRT runs directly through the downtown core along First and Second Streets. The Guadalupe Corridor LRT provides service between South San Jose and the Great America area in Santa Clara on 10-minute headways during commute hours. There are eight LRT stations within the downtown core that provide connections to virtually every bus line described above. The existing LRT stations located closest to the project site are the Children's Discovery Museum Station on Woz Way (approximately 0.4 miles from the site) and Santa Clara Street Stations on First and Second Streets (approximately 0.6 miles from the site).

The Vasona Corridor LRT, currently under construction, will extend from downtown San Jose to Campbell and eventually to Los Gatos. The Vasona line includes a new LRT station on San Fernando Street adjacent to the southwest corner of the project site. The Vasona LRT Project is described fully in the following section under ***Planned Transportation Network Improvements***.

CalTrain

CalTrain operates a commuter rail service on the SP Peninsula line seven days a week between San Jose and San Francisco. During weekday commuting hours, CalTrain also serves the south county including Gilroy, San Martin and Morgan Hill. CalTrain provides shuttle service to businesses in the Silicon Valley and on the Peninsula. Future expansion includes extending CalTrain service farther south to Salinas.

The closest CalTrain Station is the San Jose Diridon CalTrain Station, which is located at Cahill Street and San Fernando Street (approximately 0.3 miles from the site). CalTrain provides service with 15- to 30-minute headways during commute hours.

Analysis Methodology

Traffic conditions at the study intersections were evaluated using level of service (LOS). Level of Service is a qualitative description of operating conditions ranging from LOS A, or free-flow conditions with little or no delay, to LOS F, or jammed conditions with excessive delays. The various analysis methods are described below.

City of San Jose Signalized Intersections

All the study intersections except those within the downtown core[20] are subject to the City of San Jose level of service standards. The City of San Jose level of service methodology is based on the 1985 Highway Capacity Manual (HCM) method for signalized intersections calculated using the TRAFFIX software. This method evaluates signalized intersection operations on the basis of average delay time for all vehicles at the intersection. Since TRAFFIX is the CMP-designated intersection level of service software, the City of San Jose methodology employs the CMP default values for the analysis parameters. The City of San Jose level of service standard for signalized intersections is LOS D or better. The correlation between average stopped delay and level of service is shown in Table 2. The City of San Jose's General Plan exempts from the City's level of service standard intersections located within the downtown core. For the purposes of the environmental review process, impacts on the downtown intersections are evaluated using the same criteria as for intersections outside the downtown core.

CMP Intersections

Since TRAFFIX is the designated LOS methodology for both the CMP and the City of San José, the CMP study intersections are not analyzed separately, but rather are among the City of San José signalized study intersections analyzed using TRAFFIX. The only difference between the San José and CMP analyses is that project impacts are determined on the basis of a different LOS standard - the CMP level of service standard is LOS E or better. Intersections located within the downtown core are not exempt from the CMP level of service standard.

Unsignalized Intersections

The intersections along Delmas Avenue adjacent to the project site are presently unsignalized. The intersection of Delmas Avenue and San Fernando Street will be signalized as part of Vasona LRT project. Thus, this intersection was evaluated with signal control under both background and project conditions. The intersection of Delmas Avenue and Santa Clara Street will be signalized as part of the proposed project, as will a new intersection on Delmas Avenue between Santa Clara Street and San Fernando Street.[21] Thus, these intersections were evaluated with signal control under project conditions.

The evaluation of project access, intersections operations, and unsignalized project driveway intersections is described subsequently in this section.

[20] The Downtown Core area is bounded by Julian Street to the north, 4th Street to the east, I-280 to the south, and SR 87 to the west.

[21] The proposed signalization of the new intersection on Delmas Avenue between Santa Clara and San Fernando will occur as a part of the east of Delmas commercial part of the project.

TABLE 2
SIGNALIZED INTERSECTION LEVEL OF SERVICE DEFINITIONS BASED ON AVERAGE STOPPED VEHICULAR DELAY

Level of Service	Description	Average Stopped Delay Per Vehicle (Seconds)
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	$\leq$ 5.0
B	Operations with low delay occurring with good progression and/or short cycle lengths. More vehicles stop than with LOS A, causing higher levels of average delay.	5.1 to 15.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear. The number of vehicles stopping is significant, though many still pass through the intersection without stopping.	15.1 to 25.0
D	The influence of congestion becomes more noticeable. Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	25.1 to 40.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	40.1 to 60.0
F	Operation with delays unacceptable to most drivers occurring due to oversaturation, poor progression, or very long cycle lengths.	> 60.0

Source: Transportation Research Board, *Highway Capacity Manual, Special Report 209* (Washington D.C., 1985), pg. 9-4, 5.

Freeway Segments

As prescribed in the CMP technical guidelines, the level of service for freeway segments is estimated based on vehicle density. Density is calculated by the following formula:

$$D = V / (N*S)$$

where:

D = density, in vehicles per mile per lane (vpmpl)
V = peak hour volume, in vehicles per hour (vph)
N = number of travel lanes
S = average travel speed, in miles per hour (mph)

The vehicle density on a segment is correlated to level of service as shown in Table 3. The CMP requires that mixed-flow lanes and auxiliary lanes be analyzed separately from HOV (carpool) lanes. The CMP specifies that a capacity of 2,300 vehicles per hour per lane (vphpl) be used for segments six lanes or wider in both directions and a capacity of 2,200 vphpl be used for segments four lanes wide in both directions. The CMP defines an acceptable level of service for freeway segments as LOS E or better.

TABLE 3
LEVEL OF SERVICE DEFINITIONS FOR FREEWAY SEGMENTS

Level of Service	Description	Density (vehicles/mile/lane)
A	Primarily free-flow operations. Vehicles are almost completely unimpeded in ability to maneuver within stream.	Less than 10.0
B	Reasonably free-flow conditions. The ability to maneuver within the traffic stream is only slightly restricted.	10.1 - 16.0
C	Provides for stable operation, however flows approach the range in which small increases will cause a substantial deterioration in service. Freedom to maneuver within the traffic stream is noticeably restricted.	16.1 - 24.0
D	Borders on unstable flow. Small increases in flow cause substantial deterioration in service. Freedom to maneuver within the traffic stream is severely limited. Minor incidents can be expected to create substantial queuing, as the traffic stream has little space to absorb disruptions.	24.1 - 46.0
E	Operations are extremely unstable. Any incident can be expected to produce a serious breakdown with extensive queuing. Maneuverability is extremely limited.	46.5 - 55.0
F	Forced or breakdown conditions. Such conditions generally exist within queues forming behind breakdown points.	Greater than 55.0

Source: Transportation Research Board, *Highway Capacity Manual, Special Report 209*. Washington, D.C., 1994.

Existing Intersection Levels of Service

The existing lane configurations at the study intersections were provided by city staff and confirmed by observations in the field. Existing peak-hour traffic volumes were obtained from the City of San Jose and supplemented with manual turning-movement counts at intersections where counts were either unavailable or outdated (more than one year old). The existing peak-hour intersection volumes and traffic count data are included in Appendix E.

City of San Jose Intersection Analysis

The results of the level of service analysis under existing conditions are summarized in Table 4. All the signalized study intersections currently operate at an acceptable level of service (LOS D or better), according to City of San Jose standards. The level of service calculation sheets are included in Appendix E.

TABLE 4

EXISTING SIGNALIZED INTERSECTION LEVELS+A55 OF SERVICE

Intersection	Peak Hour	Count Date	Ave. Delay	LOS
SR 87 and Julian Street (E)*	AM	10/3/2001	31.6	D
	PM	9/5/2001	26.7	D
SR 87 and Julian Street (W)*	AM	10/3/2001	11.1	B
	PM	10/2/2001	9.7	B
SR 87 and Santa Clara Street*	AM	10/24/2001	13.4	B
	PM	9/19/2001	10.9	B
I-280 and Bird Avenue (N)*	AM	9/18/2001	21.2	C
	PM	9/18/2001	22.7	C
I-280 and Bird Avenue (S)*	AM	9/6/2001	22.6	C
	PM	9/6/2001	20.2	C
The Alameda and Hedding Street*	AM	9/18/2001	34.3	D
	PM	9/18/2001	24.1	C
The Alameda and Naglee Avenue*	AM	9/19/2001	25.9	D
	PM	9/19/2001	26.2	D
The Alameda and Race Street*	AM	10/10/2001	26.4	D
	PM	10/10/2001	21.2	C
Almaden Boulevard and San Carlos Street*	AM	9/6/2001	22.1	C
	PM	9/6/2001	27.2	D
Autumn Street and Santa Clara Street*	AM	9/6/2001	22.5	C
	PM	9/6/2001	14.1	B
Bird Avenue and San Carlos Street*	AM	10/31/2001	24.0	C
	PM	11/8/2001	34.2	D
Market Street and San Carlos Street*	AM	9/21/2001	26.0	D
	PM	9/21/2001	27.8	D
Montgomery Street and Santa Clara Street*	AM	9/21/2001	10.8	B
	PM	9/21/2001	14.5	B
Almaden Boulevard and Park Avenue	AM	10/1/2002	22.3	C
	PM	10/1/2002	27.1	D
Almaden Boulevard and San Fernando Street	AM	5/23/2002	14.1	B
	PM	11/16/2001	16.1	C
Autumn Street and Julian Street	AM	5/23/2002	8.9	B
	PM	5/23/2002	10.7	B
Autumn Street and San Fernando Street	AM	5/23/2002	5.5	B
	PM	5/23/2002	8.1	B
Auzerais Avenue and Bird Avenue	AM	5/23/2002	20.6	C
	PM	5/23/2002	16.6	C
Auzerais Avenue and Delmas Avenue	AM	5/23/2002	11.7	B
	PM	5/23/2002	12.7	B

* Denotes CMP intersection.

TABLE 4 (cont.)

EXISTING SIGNALIZED INTERSECTION LEVELS OF SERVICE

Intersection	Peak Hour	Count Date	Ave. Delay	LOS
Bascom Avenue and San Carlos Street	AM	11/14/2001	31.4	D
	PM	11/14/2001	31.1	D
Bird Avenue and Virginia Street	AM	5/23/2002	17.7	C
	PM	5/23/2002	11.2	B
Delmas Avenue/SB SR 87 Off-Ramp and Park Avenue	AM	2/6/2002	16.9	C
	PM	2/6/2002	21.5	C
Delmas Avenue and San Carlos Street	AM	5/23/2002	9.4	B
	PM	5/23/2002	14.9	B
First Street and Reed Street	AM	11/29/2001	17.2	C
	PM	11/29/2001	17.9	C
Lincoln Avenue and San Carlos Street	AM	5/21/2002	22.8	C
	PM	5/21/2002	27.1	D
Meridian Avenue and San Carlos Street	AM	5/22/2002	24.9	C
	PM	5/22/2002	29.7	D
Montgomery Street and Park Avenue	AM	5/23/2002	13.4	B
	PM	5/23/2002	21.3	C
Montgomery Street and San Fernando Street	AM	5/23/2002	8.9	B
	PM	5/23/2002	9.5	B
Park Avenue and Woz Way/ NB SR 87 On-Ramp	AM	10/1/2002	10.3	B
	PM	10/1/2002	14.0	B
Woz Way and San Carlos Street	AM	5/23/2002	16.8	C
	PM	5/23/2002	17.1	C

* Denotes CMP intersection.

CMP Intersection Analysis

The level of service results under existing conditions for the CMP intersections in the study area are summarized in Table 4. Measured against the CMP standards, all the signalized study intersections currently operate at acceptable level (LOS E or better). The level of service calculation sheets are included in Appendix E.

Observed Existing Traffic Conditions

Traffic conditions in the field were observed in order to identify existing operational deficiencies and to confirm the accuracy of calculated levels of service. The purpose of this effort was (1) to identify any existing traffic problems that may not be directly related to intersection level of service, (2) to identify any locations where the level of service calculation does not accurately reflect level of service in the field, (3) to identify possible causes of congestion if observed, and (4) to observe the effects of ramp metering on the local traffic.

Field observations revealed that for the most part, level of service calculations accurately reflect existing conditions. The following conditions observed in the field are not represented in the level of service analysis:

Freeway ramp metering and the traffic congestion on SR 87 occasionally creates backs up on the Julian Street on-ramps and affects the operations of the ramp terminal intersections. The on-going construction and reduced speed limits on SR 87 north of Julian Street might be contributing to the congestion.

Queue spillback was observed during the PM peak hour on Bird Avenue between the closely-spaced intersections at the I-280 interchange and Auzerais Avenue.

The northbound SR 87 off-ramp at Santa Clara Street occasionally queues past the end of the ramp and affects traffic flow on the mainline freeway. This condition occurs during many, but not all, weekday mornings and also preceding large evening events at the HP Pavilion. The variation in queue length experienced during the AM peak hour may be related to the varying event sizes at the convention center. During the busiest mornings, only the right-turn lanes queue beyond the available ramp storage.

Existing Freeway Levels of Service

Traffic volumes on the subject freeway segments were obtained from the 2001 CMP Annual Monitoring Report. The results of the analysis are summarized in Table 5. The results show that the mixed-flow lanes on the following ten directional freeway segments currently operate at an unacceptable level (LOS F) during at least one of the peak hours:

SR 87 southbound between Alma Avenue and I-280
SR 87 southbound between I-280 and Julian Street
SR 87 northbound between Julian Street and Coleman Avenue
I-280 northbound between I-880 and Meridian Avenue
I-280 northbound between Meridian Avenue and Bird Avenue
I-280 southbound between Meridian Avenue and Bird Avenue
I-280 northbound between Bird Avenue and SR 87

TABLE 5
EXISTING FREEWAY LEVEL OF SERVICE

				Existing									
				Mixed Flow					HOV				
Freeway	Location	Dir	Peak Hour	Lanes	Speed*	Volume*	Density	LOS	Lanes	Speed*	Volume*	Density	LOS
SR-87	Between Alma Avenue and I-280	NB	AM	2	65	3,770	29.0	D	-	-	-	-	-
			PM	2	67	2,810	21.0	C	-	-	-	-	-
		SB	AM	2	67	2,410	18.0	C	-	-	-	-	-
			PM	2	19	3,230	85.0	F	-	-	-	-	-
	Between I-280 and Julian Street	NB	AM	2	67	2,810	21.0	C	-	-	-	-	-
			PM	2	67	1,470	11.0	B	-	-	-	-	-
		SB	AM	2	67	2,140	16.0	B	-	-	-	-	-
			PM	2	17	3,060	90.0	F	-	-	-	-	-
	Between Julian Street and Coleman Avenue	NB	AM	2	9	2,160	120.0	F	-	-	-	-	-
			PM	2	67	2,010	15.0	B	-	-	-	-	-
		SB	AM	2	67	2,810	21.0	C	-	-	-	-	-
			PM	2	57	4,450	39.0	D	-	-	-	-	-
I-280	Between I-880 and Meridian Avenue	SB	AM	4	66	6,350	24.1	D	1	67	1,010	3.8	A
			PM	4	60	6,890	28.7	D	1	59	2,180	8.3	A
		NB	AM	4	18	5,930	82.4	F	1	66	1,720	7.2	A
			PM	4	54	7,100	32.9	D	1	67	940	13.1	B
	Between Meridian Avenue and Bird Avenue	SB	AM	4	61	8,780	36.0	D	-	-	-	-	-
			PM	4	25	7,300	73.0	F	-	-	-	-	-
		NB	AM	4	25	7,300	73.0	F	-	-	-	-	-
			PM	4	45	5,880	32.7	D	-	-	-	-	-
	Between Bird Avenue and SR-87	SB	AM	4	67	6,160	23.0	C	-	-	-	-	-
			PM	4	23	7,080	77.0	F	-	-	-	-	-
		NB	AM	4	21	6,800	81.0	F	-	-	-	-	-
			PM	4	15	8,640	144.0	F	-	-	-	-	-
	Between SR-87 and 10th Street	SB	AM	4	66	6,340	24.0	D	-	-	-	-	-
			PM	4	26	7,280	70.0	F	-	-	-	-	-
		NB	AM	4	36	8,060	56.0	F	-	-	-	-	-
			PM	5	24	8,190	68.3	F	-	-	-	-	-

* Source - Santa Clara Valley Transportation Authority Congestion Management Program Monitoring Study 2001.

I-280 southbound between Bird Avenue and SR 87
I-280 northbound between SR 87 and Tenth Street
I-280 southbound between SR 87 and Tenth Street

The mixed-flow lanes on all of the other study freeway segments operate at LOS E or better during both the AM and PM peak hours.

All of the HOV lanes on the study freeway segments operate at LOS E or better during both the AM and PM peak hours.

Background Conditions

Background conditions are defined as conditions just prior to completion of the proposed development. Traffic volumes for background conditions comprise volumes from the existing traffic counts, plus traffic generated by other approved developments in the vicinity of the site. This discussion first describes the planned transportation network improvements that were also included under background conditions. Then the procedure used to determine background traffic volumes is described and the results of the LOS calculations are presented.

Planned Transportation Network Improvements

VTA has begun construction on the Vasona LRT Line. Scheduled for completion in 2004, Phase I will extend from downtown San Jose to Campbell. In Phase II, the Vasona line will be extended to Los Gatos. The Vasona LRT project includes a new station on San Fernando Street adjacent to the southwest corner of the project site. The alignment of the Vasona LRT project is shown on Figure 14. The intersection of Delmas Avenue and San Fernando Street will be signalized as part of the Vasona LRT Project. A westbound right-turn lane will also be added at this intersection.

When completed, the Vasona LRT line will affect the Delmas/San Fernando intersection operations. Normal signal operations will be preempted when a light rail train arrives. During the train crossing, all vehicular phases will have a red signal indication. The all-red time associated with LRT crossings is accounted for in the future conditions intersection level of service calculations as additional lost time.

The Guadalupe River Park and Flood Protection Project will construct several new segments of the Guadalupe River trail including a segment between Coleman Avenue and Santa Clara Street that will link two existing segments and provide a continuous trail between I-880 and I-280. Scheduled for completion by the end of 2004, the project will enhance the existing bicycle and pedestrian facilities within the study area.

With the above exceptions, it is assumed in this analysis that the transportation network under background conditions, including bicycle and pedestrian facilities, transit service, roadways and intersection lane configurations, will be unchanged from existing conditions.

Background Traffic Volumes

Background peak-hour traffic volumes were established by adding to the existing volumes the estimated traffic from approved but not yet constructed developments in the vicinity of the site. The added traffic from approved but not yet constructed developments was provided by the City in the form of the Approved Trips Inventory (ATI). The Background conditions traffic volumes include traffic from the recently approved CIM project, a downtown mixed-use project consisting of about 530 high rise condominiums over 118,250 square feet of ground floor retail. Background traffic volumes are shown in Appendix E. The ATI are also included in Appendix E.

Background Intersection Levels of Service

City of San Jose Intersection Analysis

The results of the level of service analysis under background conditions are summarized in Table 6. All of the signalized study intersections continue to operate at an acceptable level of service (LOS D or better) under background conditions, according to City of San Jose standards. The calculation sheets are included in Appendix E.

CMP Intersection Analysis

The level of service results under background conditions for the CMP intersections in the study area are summarized in Table 6. Measured against the CMP standards, all the signalized study intersections will operate at acceptable level (LOS E or better). The level of service calculation sheets are included in Appendix E.

2. Transportation Impacts

The project site is located in close proximity to the HP Pavilion. Preceding and following Pavilion events, use of the study area roadways is unusually high with congestion not experienced during an average day. During these peak periods of Pavilion traffic, special traffic control measures are implemented, including turn restrictions and the use of traffic control officers. The City of San José's level of service standards do not apply to traffic conditions during these special events, but rather, potential project impacts are identified based on traffic conditions that occur on an average day without a special event.

TABLE 6

BACKGROUND SIGNALIZED INTERSECTION LEVELS OF SERVICE

			Existing		Background	
Intersection	Peak Hour	Count Date	Ave. Delay	LOS	Ave. Delay	LOS
SR 87 and Julian Street (E)*	AM	10/3/2001	31.6	D	36.2	D
	PM	9/5/2001	26.7	D	28.9	D
SR 87 and Julian Street (W)*	AM	10/3/2001	11.1	B	11.3	B
	PM	10/2/2001	9.7	B	10.1	B
SR 87 and Santa Clara Street*	AM	10/24/2001	13.4	B	17.6	C
	PM	9/19/2001	10.9	B	12.5	B
I-280 and Bird Avenue (N)*	AM	9/18/2001	21.2	C	21.3	C
	PM	9/18/2001	22.7	C	23.7	C
I-280 and Bird Avenue (S)*	AM	9/6/2001	22.6	C	24.5	C
	PM	9/6/2001	20.2	C	20.6	C
The Alameda and Hedding Street*	AM	9/18/2001	34.3	D	34.5	D
	PM	9/18/2001	24.1	C	24.1	C
The Alameda and Naglee Avenue*	AM	9/19/2001	25.9	D	25.9	D
	PM	9/19/2001	26.2	D	23.9	C
The Alameda and Race Street*	AM	10/10/2001	26.4	D	26.4	D
	PM	10/10/2001	21.2	C	20.7	C
Almaden Boulevard and San Carlos Street*	AM	9/6/2001	22.1	C	24.6	C
	PM	9/6/2001	27.2	D	36.2	D
Autumn Street and Santa Clara Street*	AM	9/6/2001	22.5	C	22.5	C
	PM	9/6/2001	14.1	B	14.3	B
Bird Avenue and San Carlos Street*	AM	10/31/2001	24.0	C	24.5	C
	PM	11/8/2001	34.2	D	38.0	D
Market Street and San Carlos Street*	AM	9/21/2001	26.0	D	29.9	D
	PM	9/21/2001	27.8	D	37.3	D
Montgomery Street and Santa Clara Street*	AM	9/21/2001	10.8	B	10.8	B
	PM	9/21/2001	14.5	B	14.7	B
Almaden Boulevard and Park Avenue	AM	10/1/2002	22.3	C	25.3	D
	PM	10/1/2002	27.1	D	28.4	D
Almaden Boulevard and San Fernando Street	AM	5/23/2002	14.1	B	15.0	C
	PM	11/16/2001	16.1	C	15.7	C
Autumn Street and Julian Street	AM	5/23/2002	8.9	B	7.5	B
	PM	5/23/2002	10.7	B	10.5	B
Autumn Street and San Fernando Street	AM	5/23/2002	5.5	B	5.4	B
	PM	5/23/2002	8.1	B	8.2	B
Auzerais Avenue and Bird Avenue	AM	5/23/2002	20.6	C	20.2	C
	PM	5/23/2002	16.6	C	16.8	C
Auzerais Avenue and Delmas Avenue	AM	5/23/2002	11.7	B	12.1	B
	PM	5/23/2002	12.7	B	12.4	B

* Denotes CMP intersection.

TABLE 6 (cont.)

BACKGROUND SIGNALIZED INTERSECTION LEVELS OF SERVICE

Intersection	Peak Hour	Count Date	Existing Ave. Delay	Existing LOS	Background Ave. Delay	Background LOS
Bascom Avenue and San Carlos Street	AM	11/14/2001	31.4	D	32.2	D
	PM	11/14/2001	31.1	D	31.6	D
Bird Avenue and Virginia Street	AM	5/23/2002	17.7	C	17.4	C
	PM	5/23/2002	11.2	B	11.1	B
Delmas Avenue/SB SR 87 Off-Ramp and Park Avenue	AM	2/6/2002	16.9	C	16.9	C
	PM	2/6/2002	21.5	C	22.7	C
Delmas Avenue and San Carlos Street	AM	5/23/2002	9.4	B	12.2	B
	PM	5/23/2002	14.9	B	19.0	C
First Street and Reed Street	AM	11/29/2001	17.2	C	24.3	C
	PM	11/29/2001	17.9	C	19.5	C
Lincoln Avenue and San Carlos Street	AM	5/21/2002	22.8	C	22.8	C
	PM	5/21/2002	27.1	D	27.1	D
Meridian Avenue and San Carlos Street	AM	5/22/2002	24.9	C	25.3	D
	PM	5/22/2002	29.7	D	30.3	D
Montgomery Street and Park Avenue	AM	5/23/2002	13.4	B	13.2	B
	PM	5/23/2002	21.3	C	21.3	C
Montgomery Street and San Fernando Street	AM	5/23/2002	8.9	B	8.7	B
	PM	5/23/2002	9.5	B	9.4	B
Park Avenue and Woz Way/ NB SR 87 On-Ramp	AM	10/1/2002	10.3	B	13.1	B
	PM	10/1/2002	14.0	B	13.9	B
Woz Way and San Carlos Street	AM	5/23/2002	16.8	C	15.2	C
	PM	5/23/2002	17.1	C	16.4	C
Delmas Avenue and San Fernando Street /1/	AM	6/18/2002	-	-	9.2	B
	PM	6/18/2002	-	-	11.8	B

[1] Intersection is currently unsignalized. The planned Vasona LRT Project will add signal control and a westbound right-turn lane.

* Denotes CMP intersection.

Thresholds of Significance

For the purposes of this project, a traffic impact is considered significant if the project would:

- cause the level of service at a City of San Jose intersection to degrade from an acceptable LOS D or better under background conditions to an unacceptable LOS E or F under project conditions, or
- cause both the critical-movement delay at a City of San Jose intersection to increase by four or more seconds and the demand-to-capacity ratio (V/C) to increase by .01 or more at an intersection already operating at an unacceptable LOS E or F under background conditions.[22]
- cause the level of service of a CMP regional intersection to degrade from an acceptable LOS E or better under background conditions to an unacceptable LOS F under project conditions, or
- cause critical movement delay at such a CMP intersection that is already operating at LOS F to increase by four or more seconds; or
- cause a freeway segment to operate at LOS F and the number of project trips on that segment constitutes at least one percent of capacity on that segment; or
- substantially increase hazards due to a design feature or incompatible uses; or
- conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks); or
- result in inadequate parking capacity; or
- result in inadequate emergency access.

A significant impact by City of San Jose standards is said to be satisfactorily mitigated when measures are implemented that will restore intersection level of service to background conditions or better.

Intersections located within the downtown core are exempt from the City's level of service standard. The Downtown Core area is bounded by Julian Street to the north, 4th Street to the east, I-280 to the south, and SR 87 to the west. For the purposes of the environmental review process, however, impacts on the downtown intersections are evaluated using the same criteria as for intersections outside the downtown core.

[22] An exception to this rule applies when the addition of project traffic reduces the amount of average stopped delay for critical movements (i.e., the change in average stopped delay for critical movements is negative). In this case, the threshold of significance is an increase in the critical V/C value by .01 or more.

Project Condition Roadway Network

The proposed project includes some transportation improvements for the roadways and intersections adjacent to the project site. The intersection of Delmas Avenue and Santa Clara Street will be signalized and the westbound left-turn pocket will be lengthened from 120 to 300 feet. The intersection of Delmas Avenue and San Fernando Street will be signalized as part of the Vasona LRT project. Additional intersection improvements included in the project include widening San Fernando Street along the project frontage to add left-turn lanes on the east and west approaches at Delmas Avenue; two intersections (one signalized and on right-in/right-out unsignalized) also will be added to Delmas Avenue between Santa Clara and San Fernando Streets. The project also includes widening Delmas Avenue between Santa Clara Street and San Fernando Street to provide for a southbound left-turn lane into the project driveway and a second southbound through lane at San Fernando Street. The project also includes additional roadway improvements on the segment of Delmas Avenue south of San Fernando Street to provide two southbound travel lanes. The mitigation drawings for these proposed improvements are included in Appendix E.

Some of the project-sponsored transportation improvements discussed in the preceding paragraph (*i.e.*, full intersection improvements along, and full widening of, Delmas Avenue between Santa Clara and San Fernando; widening Delmas south of San Fernando to provide two southbound lanes; and widening San Fernando to add left-turn lanes; and signalizing the Delmas/Santa Clara intersection) are necessary to mitigate project impacts only once the east of Delmas commercial development is constructed. In other words, traffic from the proposed residential development west of Delmas will not trigger the need for these improvements. Because the project would likely be phased (starting with the west of Delmas residential development), these project-sponsored improvements would be required and constructed only once the east of Delmas commercial development is constructed. Please refer to the Transportation Impact Analysis for a full description of the proposed phasing of transportation improvements, Appendix E of this EIR.

Except for the improvements that are described in the above paragraphs, the transportation network under project conditions is assumed to be unchanged from existing conditions.

Project Traffic Estimates

On the portion of the project site east of Delmas Avenue, the project proposes up to 1,025,000 square feet (sf) of new commercial space, consisting of 5,000 to 50,000 sf of retail space and the balance as office space. The historic portion of the San Jose Water Company office building at the northeast corner of the site will remain with the project, and will have office and/or retail uses subject to market demand.[23] The remainder of the existing building, that contain ancillary uses which generate negligible traffic, will be removed. Subtracting the square footage of the historic office building (15,900 sf), yields a net project of 1,004,100 sf. On the portion of the site west of Delmas Avenue, the project proposes up to 325 residential units and 5,000 to 15,000 sf of ground-floor commercial retail space.

[23] Vehicle trips generated by commercial uses in the existing San José Water Company office building are already assumed to be on the road and, therefore, are not included in the analysis of project-generated traffic.

The magnitude of traffic produced by a new development and the locations where that traffic would appear are estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. First, the magnitude of traffic entering and exiting the site is estimated for the weekday AM and PM peak hours. In the second step, the directions the trips use to approach and depart the site are estimated. The trips are then assigned to specific street segments and intersection turning movements. These procedures are described further in the following sections.

Trip Generation

The amount of traffic generated by the proposed commercial and residential development is estimated by applying the appropriate trip generation rates to the size of the development. Project trips were estimated using trip generation rates published by the Institute of Transportation Engineers Trip Generation Manual, Sixth Edition and the trip rates recommended by the City of San Jose. Reductions for transit use and pass-by trips were calculated per the guidelines set forth by the City of San Jose and VTA. Table 7 presents the trip generation rates and trip reductions. The project trip generation for the residential (west side of Delmas) and commercial (east side of Delmas) has been calculated as shown in Tables 8 and 9.

The project trip estimates reflect the proposed minimum and maximum retail sizes. Because the size of residential development on the site west of Delmas Avenue is independent of the retail size, the maximum retail option is expected to generate more traffic than the minimum retail option under every time period. For the site east of Delmas Avenue, the total size of commercial space is fixed such that an increase in retail area is offset by an equivalent decrease in office space. Compared to office space, retail space generates fewer trips per square foot during the AM peak hour and more trips during the PM peak hour. Over the entire day, retail space generates more traffic than office space. Thus, the maximum retail option will generate more traffic than the maximum office (minimum retail) option during PM peak hour and over the entire day. In contrast, during the AM peak hour, the maximum office (minimum retail) option will generate the greatest number of trips. For traffic analysis purposes, the retail size option that will generate the highest number of trips during each peak hour was evaluated. One of the primary markets for retail at this location will be the local residents and office workers. Therefore, a conservative 25 percent reduction was applied to the retail trip generation to account for these internal trips. Combining the west and east sites, the project is estimated to generate a maximum of 10,169 daily trips with 1,323 trips during AM peak hour and 1,395 trips during PM peak hour.

In comparison, the project retail size option with the fewest number of trips would generate 9,531 daily trips with 1,291 trips during the AM peak hour and 1,363 trips during the PM peak hour. The difference in traffic generation associated with the proposed retail size options (32 trips during each of the AM and PM peak hours) is not great enough to cause a difference in the identification of significant project impacts nor would it alter the extent of improvements required to mitigate a significant project impact.

TABLE 7
TRIP GENERATION RATES

Land Use/Size	Daily Rate[a,b]	Transit Reduction[c]	Pass-By Reduction[b]	AM Peak-Hour Factor[b]	AM Peak Hour Directional Split[b]		AM Peak-Hour Rate[a]			PM Peak-Hour Factor[b]	PM Peak Hour Directional Split[b]		PM Peak-Hour Rate[a]		
					In	Out	In	Out	Total		In	Out	In	Out	Total
Office															
1,004,100 s.f.	7.53	3%	0%	15%	88%	12%	1.00	0.13	1.13	15%	17%	83%	0.20	0.97	1.16
959,100 s.f.	7.61	3%	0%	15%	88%	12%	1.00	0.14	1.14	15%	17%	83%	0.20	0.97	1.17
Retail	40	0%	25%	2%	60%	40%	0.36	0.24	0.60	9%	50%	50%	1.35	1.35	2.70
Residential	6	9%	0%	10%	35%	65%	0.19	0.35	0.55	10%	65%	35%	0.35	0.19	0.55

[a]Trips per 1,000 square feet or dwelling unit.

[b]Source(for Retail and Residential Component): "Common Vehicular Trip Generation Rates for the San Jose Area", March 1994, City of San Jose, Department of Public Works, Transportation Division.

[b] Source (for office component): Fitted curve equation from *ITE Trip Generation Manual, 6th Edition.*

[c]Source: "Transportation Impact Analysis Guidelines", May 7, 1998, Santa Clara Valley Transportation Authority, Congestion Management Program.

TABLE 8
PROJECT TRIP GENERATION ESTIMATES - WEST OF DELMAS

Land Use		Daily Rate[a]	Daily Trips	AM Peak-Hour Rate[a]			AM Peak-Hour Trips			PM Peak-Hour Rate[a]			PM Peak-Hour Trips		
				In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
Minimum Retail Option															
Residential	325 d.u.	5.46	1,775	0.19	0.35	0.55	62	115	177	0.35	0.19	0.55	115	62	177
Retail	5,000 s.f.	30	150	0.36	0.24	0.60	2	1	3	1.35	1.35	2.70	7	7	14
	Internal Trips (25%)		(38)				(0)	(0)	(1)				(2)	(2)	(3)
		Total	1,887				63	116	180				120	67	188
Maximum Retail Option															
Residential	325 d.u.	5.46	1,775	0.19	0.35	0.55	62	115	177	0.35	0.19	0.55	115	62	177
Retail	15,000 s.f.	30	450	0.36	0.24	0.60	5	4	9	1.35	1.35	2.70	20	20	41
	Internal Trips (25%)		(113)				(1)	(1)	(2)				(5)	(5)	(10)
		Total	**2,112**				**66**	**118**	**184**				**131**	**77**	**208**

[a]Trips per 1,000 square feet or dwelling unit including reductions for transit useage and pass-by trips.
The worst case scenario (shown in **bold**) is analyzed.

TABLE 9
PROJECT TRIP GENERATION ESTIMATES - EAST OF DELMAS

Land Use		Daily Rate[a]	Daily Trips	AM Peak-Hour Rate[a] In	AM Peak-Hour Rate[a] Out	AM Peak-Hour Rate[a] Total	AM Peak-Hour Trips In	AM Peak-Hour Trips Out	AM Peak-Hour Trips Total	PM Peak-Hour Rate[a] In	PM Peak-Hour Rate[a] Out	PM Peak-Hour Rate[a] Total	PM Peak-Hour Trips In	PM Peak-Hour Trips Out	PM Peak-Hour Trips Total
Maximum Office Option															
Office	1,004,100 s.f.	7.53	7,569	1.00	0.13	1.13	1,001	136	1,137	0.20	0.97	1.16	199	970	1,169
	Internal Trips[b]		(38)				(0)	(0)	(1)				(2)	(2)	(3)
Retail	5,000 s.f.	30	150	0.36	0.24	0.60	2	1	3	1.35	1.35	2.70	7	7	14
	Internal Trips (25%)		(38)				(0)	(0)	(1)				(2)	(2)	(3)
	Total		7,644				**1,002**	**137**	**1,139**				202	973	1,175
Maximum Retail Option															
Office	959,100 s.f.	7.61	7,307	1.00	0.14	1.14	965	132	1,096	0.20	0.97	1.17	190	929	1,120
	Internal Trips[b]		(375)				(5)	(3)	(8)				(17)	(17)	(34)
Retail	50,000 s.f.	30	1,500	0.36	0.24	0.60	18	12	30	1.35	1.35	2.70	68	68	135
	Internal Trips (25%)		(375)				(5)	(3)	(8)				(17)	(17)	(34)
	Total		**8,057**				974	138	1,111				**224**	**963**	**1,187**

[a]Trips per 1,000 square feet includes reductions for transit useage and pass-by trips.
[b]Internal trips for the office component are equal to the number of internal trips calculated for the retail component.
[c]Source: "Transportation Impact Analysis Guidelines", May 7, 1998, Santa Clara Valley Transportation Authority, Congestion Management Program.
The worst case scenario (shown in **bold**) is analyzed.

Trip Distribution

Separate trip distribution patterns for the proposed residential and non-residential uses were estimated, based on existing travel patterns in the area, the locations of complementary land uses, and recent traffic reports completed for other nearby development proposals, including the Downtown San Jose Development Plan. Figures 15 and 16 illustrate the project trip distribution patterns for the proposed residential and non-residential uses, respectively. Compared to the residential trip distribution pattern, the non-residential distribution assumes a larger percentage of trips to/from the south, fewer trips to/from the north, and a greater proportion of trips approaching and departing on freeways versus surface streets.

Project Trip Assignment

The peak-hour trips generated by the proposed project were assigned to the roadway system in accordance with the trip distribution patterns discussed above. Figure 8 in Appendix E shows the project trip assignment for the proposed project without any reduction for the trips to and from the existing public parking lots on the project site.

Project Traffic Volumes

The peak-hour trip assignments for the proposed development were added to background traffic volumes to determine the volumes for project conditions. Background traffic volumes plus project trips are typically referred to simply as *project traffic volumes*; this is contrasted with the term *project trips*, which is used to signify the traffic that is produced specifically by the project. Detailed volumes are provided in Appendix E. Project conditions, like background conditions, include the intersection and roadway improvements described previously. For the purposes of the traffic impact analysis, it is assumed that the trips to and from the existing public parking lots on the San José Water site will not be eliminated, but rather will merely be diverted to other nearby parking facilities. Because of the large number of nearby parking facilities, it is not possible to predict precisely where these diversions will occur, but it is expected that they will occur nearby. For this reason, project traffic volumes at study intersections immediately adjacent to the site (Santa Clara/Delmas and San Fernando/Delmas) were reduced to account for the removal of the existing public parking lots; however, no reductions were made at any other study intersections in the vicinity. The project traffic volumes are shown graphically in Appendix E.

Project Intersection Analysis

Intersection LOS calculations were conducted to evaluate the impacts of the proposed mixed-use project. The results of the level of service analysis under project conditions are summarized in Table 10. The level of service calculation sheets are included in Appendix E.

City of San Jose Intersection Impacts

The addition of project traffic will cause the following two intersections to operate at an unacceptable level (LOS E or worse):

- Bird Avenue and San Carlos Street (PM Peak Hour)
- Delmas Avenue/SB SR 87 Off-Ramp and Park Avenue (PM Peak Hour)

The project, therefore, will have a significant impact at both of these intersections, using the City of San Jose level of service standards.[24]

CMP Intersection Impacts

With the addition of project traffic, all of the CMP study intersections are expected to still operate at acceptable levels (LOS E or better). None of the CMP study intersections will be significantly impacted by the project.

♦ **Project-generated traffic will cause two signalized local intersections, Bird Avenue/San Carlos Street and Delmas Avenue/SB SR 87 Off-Ramp and Park Avenue to degrade to LOS E or worse during the PM peak hour. (Significant Impact)**

Unsignalized Intersection Analysis

Peak-hour signal warrants were checked for the unsignalized intersection of Santa Clara Street and Delmas Avenue to determine whether signalization will be justified on the basis of project peak-hour volumes. The analysis revealed that this study intersection will meet the Caltrans peak-hour volume warrant during the PM peak hour of traffic under project conditions (once the east of Delmas commercial development is built). The signal warrant analysis sheets are included in Appendix E. The project proposes to install a traffic signal at this intersection, which will avoid any potential safety or traffic impacts that may have resulted without the signal.

[24] It is noted that these significant impacts occur because of the traffic generated by the proposed commercial development east of Delmas Avenue. Mitigation for these impacts, therefore, would only be required when the east-of-Delmas site is built. Please refer to the Traffic Impact Analysis, Appendix E of this EIR, for a detailed description of the phasing of mitigation.

TABLE 10

PROJECT INTERSECTION LEVELS OF SERVICE

		Background		Project Conditions				Mitigated Project	
Intersection	Peak Hour	Ave. Delay	LOS	Ave. Delay	LOS	Incr. In Crit Delay	Incr. In Crit V/C	Ave. Delay	LOS
SR 87 and Julian St (E)*	AM	36.2	D	36.4	D	0.1	0.003		
	PM	28.9	D	29.2	D	0.3	0.008		
SR 87 and Julian St (W)*	AM	11.3	B	11.6	B	0.3	0.005		
	PM	10.1	B	10.3	B	0.2	0.006		
SR 87 and Santa Clara St*	AM	17.6	C	17.7	C	2.2	0.022		
	PM	12.5	B	12.5	B	0.1	0.010		
I-280 and Bird Av (N)*	AM	21.3	C	22.0	C	0.3	0.044		
	PM	23.7	C	34.2	D	12.0	0.143		
I-280 and Bird Av (S)*	AM	24.5	C	26.3	D	1.9	0.068		
	PM	20.6	C	26.6	D	12.8	0.161		
The Alameda and Hedding St*	AM	34.5	D	34.6	D	0.3	0.007		
	PM	24.1	C	24.3	C	0.6	0.012		
The Alameda and Naglee Av*	AM	25.9	D	25.9	D	0.0	0.005		
	PM	23.9	C	23.6	C	0.5	0.014		
The Alameda and Race St*	AM	26.4	D	26.3	D	0.0	0.005		
	PM	20.7	C	20.5	C	0.0	0.000		
Almaden Blvd and San Carlos St*	AM	24.6	C	24.7	C	0.0	0.004		
	PM	36.2	D	36.6	D	0.6	0.006		
Autumn St and Santa Clara St*	AM	22.5	C	22.6	C	0.3	0.023		
	PM	14.3	B	14.1	B	0.0	0.021		
Bird Av and San Carlos St* /3/	AM	24.5	C	25.6	D	-7.0	0.024	24.9	C
	PM	38.0	D	45.3	E	14.2	0.090	37.4	D
Market St and San Carlos St*	AM	29.9	D	31.0	D	0.1	0.002		
	PM	37.3	D	38.0	D	1.0	0.009		
Montgomery St and Santa Clara St*	AM	10.8	B	10.8	B	0.1	0.007		
	PM	14.7	B	14.6	B	0.0	0.000		
Almaden Blvd and Park Av	AM	25.3	D	25.2	D	-0.2	0.006		
	PM	28.4	D	28.6	D	0.0	0.000		
Almaden Blvd and San Fernando St	AM	15.0	C	13.6	B	-0.5	0.025		
	PM	15.7	C	15.8	C	0.3	0.008		
Autumn St and Julian St	AM	7.5	B	7.9	B	0.2	0.002		
	PM	10.5	B	10.7	B	0.2	0.005		
Autumn St and San Fernando St	AM	5.4	B	5.2	B	-0.2	0.239		
	PM	8.2	B	8.5	B	0.1	0.155		
Auzerais Av and Bird Av	AM	20.2	C	14.5	B	0.6	0.061		
	PM	16.8	C	19.6	C	3.4	0.160		

* Denotes CMP intersection.

[1] Intersection is currently unsignalized. The planned Vasona LRT Project will add signal control and a westbound right-turn lane. Project-sponsored improvements include addition of left-turn lanes on the east and west approaches and a second southbound through lane. The above results reflect service-only use of the proposed project driveway on San Fernando Street.

[2] Intersection would be signalized as a part of the proposed project.

[3] Recommended mitigation measure (add a 2nd NB left-turn lane) would mitigate significant project impact on intersection LOS.

[4] Mitigation measure (add a 2nd SB through lane) would mitigate significant project impact on intersection LOS.

TABLE 10 (cont.)
PROJECT INTERSECTION LEVELS OF SERVICE

		Background		Project Conditions				Mitigated Project	
	Peak	Ave.		Ave.		Incr. In	Incr. In	Ave.	
Intersection	Hour	Delay	LOS	Delay	LOS	Crit Delay	Crit V/C	Delay	LOS
Auzerais Av and Delmas Av	AM	12.1	B	12.4	B	-0.3	0.010		
	PM	12.4	B	11.1	B	-1.2	0.049		
Bascom Av and San Carlos St	AM	32.2	D	32.9	D	0.1	0.002		
	PM	31.6	D	31.8	D	0.5	0.016		
Bird Av and Virginia St	AM	17.4	C	17.4	C	0.0	0.008		
	PM	11.1	B	11.0	B	-0.1	0.005		
Delmas Av/SB SR 87 and Park Av /4/	AM	16.9	C	20.0	C	3.4	0.147	18.6	C
	PM	22.7	C	161.8	F	194.0	0.441	30.6	D
Delmas Av and San Carlos St	AM	12.2	B	13.7	B	1.2	0.031		
	PM	19.0	C	21.1	C	0.3	0.131		
First St and Reed St	AM	24.3	C	24.5	C	0.2	0.003		
	PM	19.5	C	19.6	C	0.1	0.003		
Lincoln Av and San Carlos St	AM	22.8	C	23.2	C	0.1	0.005		
	PM	27.1	D	27.1	D	0.1	0.011		
Meridian Av and San Carlos St	AM	25.3	D	25.3	D	0.0	0.007		
	PM	30.3	D	30.3	D	0.1	0.010		
Montgomery St and Park Av	AM	13.2	B	14.2	B	-13.1	0.066		
	PM	21.3	C	22.0	C	0.8	0.116		
Montgomery St and San Fernando St	AM	8.7	B	9.7	B	0.9	0.023		
	PM	9.4	B	12.5	B	3.2	0.139		
Park Av and Woz Way/ NB SR 87	AM	13.1	B	13.2	B	0.0	0.000		
	PM	13.9	B	15.6	C	0.0	0.000		
Woz Way and San Carlos St	AM	15.2	C	15.1	C	0.0	0.003		
	PM	16.4	C	16.4	C	0.0	0.000		
Delmas Av and Santa Clara St /2/	AM	-	-	10.2	B	14.8	0.246		
	PM	-	-	11.8	B	9.1	0.183		
Delmas Av and San Fernando St /1/	AM	9.2	B	17.9	C	9.5	0.252		
	PM	11.8	B	20.0	C	6.3	0.231		
Delmas Avenue and Project Driveway	AM	-	-	19.9	C	-	-		
	PM	-	-	17.9	C	-	-		

* Denotes CMP intersection.

[1] Intersection is currently unsignalized. The planned Vasona LRT Project will add signal control and a westbound right-turn lane. Project-sponsored improvements include addition of left-turn lanes on the east and west approaches and a second southbound through lane. The above results reflect service-only use of the proposed project driveway on San Fernando Street.

[2] Intersection would be signalized as a part of the proposed project.

[3] Recommended mitigation measure (add a 2nd NB left-turn lane) would mitigate significant project impact on intersection LOS.

[4] Recommended mitigation measure (add a 2nd SB through lane) would mitigate significant project impact on intersection LOS.

- **The project proposes to signalize the intersection of Santa Clara Street and Delmas Avenue coincident with the east of Delmas commercial development, where project-generated traffic will cause the unsignalized intersection to meet the Caltrans peak-hour signal warrant during the PM peak hour. (Less than Significant Impact)**

Project Freeway Segment Analysis

Project traffic volumes on the subject freeway segments were estimated by adding project trips to the existing volumes obtained from the 2001 CMP Annual Monitoring Report. The results of the freeway analysis are summarized in Table 11. The results show that the mixed-flow lanes on ten of the directional freeway segments currently operate at an unacceptable level (LOS F) during at least one of the peak hours. Based on the CMP impact criteria, the project is expected to cause a significant increase in traffic volume (more than 1% of capacity) on five of these ten freeway segments. Project-generated traffic will have a significant impact on following five study freeway segments:

- SR 87 southbound between Alma Avenue and I-280 (PM peak hour)
- SR 87 southbound between I-280 and Julian Street (PM peak hour)
- I-280 southbound between Bird Avenue and SR 87 (PM peak hour)
- I-280 northbound between SR 87 and Tenth Street (AM peak hour)
- I-280 southbound between SR 87 and Tenth Street (PM peak hour)

The HOV lanes on all of the study freeway segments will operate at LOS E or better during both the AM and PM peak hours.

The planned addition of HOV lanes on Highway 87 between Julian Street and SR 85 will relieve the existing freeway congestion on some of the impacted freeway segments in the project vicinity. Scheduled for completion in 2005, this highway improvement project is funded through a combination of State and local funding (1996 Measure B). Nevertheless, mitigation of significant project impacts on freeway segments would require further freeway widening to construct additional through lanes. It is not feasible for individual development projects to bear responsibility for implementing such extensive transportation system improvements. The project impact on the freeways is, therefore, considered significant and unavoidable.

- **The project will have a greater than 1% impact on five mixed-flow freeway segments currently operating at LOS F. (Significant Impact)**

Construction Traffic Impacts

Construction of the project is anticipated to be phased, through approximately 2008. During periods of construction activity, there will be some occasional disruption to local traffic while proposed public street improvements or other infrastructure are being constructed on or in existing roadways (West Santa Clara Street, Delmas Avenue, West San Fernando Street). It is anticipated that there will be some staging on Delmas Avenue during the reconstruction of Delmas, and during the construction of the various phases. At this point, it is not anticipated that there will be any need for staging on Santa Clara or San Fernando Streets, unless it pertains directly to offsite improvements. In conformance with the City of San José policies for work done in public street rights-of-way, the work will be staged to minimize peak hour

TABLE 11
PROJECT CONDITIONS FREEWAY LEVEL OF SERVICE

				Existing + Project Trips										Project Trips				
				Mixed Flow					HOV					Total	Mixed Flow		HOV	
Freeway	Location	Dir	Peak Hour	Lanes	Speed*	Volume	Density	LOS	Lanes	Speed*	Volume	Density	LOS	Volume	Volume	% Capacity	Volume	%Capacity
SR-87	Between Alma Avenue and I-280	NB	AM	2	65	3,937	30.3	D	-	-	-	-	-	167	167	3.80	-	-
			PM	2	67	2,860	21.3	C	-	-	-	-	-	50	50	1.14	-	-
		SB	AM	2	67	2,444	18.2	C	-	-	-	-	-	34	34	0.77	-	-
			PM	2	19	3,393	89.3	**F**	-	-	-	-	-	163	163	**3.70**	-	-
	Between I-280 and Julian Street	NB	AM	2	67	3,272	24.4	D	-	-	-	-	-	462	462	10.50	-	-
			PM	2	67	1,609	12.0	B	-	-	-	-	-	139	139	3.16	-	-
		SB	AM	2	67	2,205	16.5	C	-	-	-	-	-	65	65	1.48	-	-
			PM	2	17	3,223	94.8	**F**	-	-	-	-	-	163	163	**3.70**	-	-
	Between Julian Street and Coleman Avenue	NB	AM	2	9	2,194	121.9	F	-	-	-	-	-	34	34	0.77	-	-
			PM	2	67	2,101	15.7	B	-	-	-	-	-	91	91	2.07	-	-
		SB	AM	2	67	2,903	21.7	C	-	-	-	-	-	93	93	2.11	-	-
			PM	2	57	4,492	39.4	D	-	-	-	-	-	42	42	0.95	-	-
I-280	Between I-880 and Meridian Avenue	SB	AM	4	66	6,527	24.7	D	1	67	1,044	4.0	A	211	177	2.01	34	1.48
			PM	4	60	6,935	28.9	D	1	59	2,201	8.3	A	66	45	0.51	21	0.91
		NB	AM	4	18	5,963	82.8	F	1	66	1,733	7.2	A	46	33	0.38	13	0.57
			PM	4	54	7,279	33.7	D	1	67	967	13.4	B	206	179	2.03	27	1.17
	Between Meridian Avenue and Bird Avenue	SB	AM	4	61	8,991	36.8	D	-	-	-	-	-	211	211	2.40	-	-
			PM	4	25	7,366	73.7	F	-	-	-	-	-	66	66	0.75	-	-
		NB	AM	4	25	7,346	73.5	F	-	-	-	-	-	46	46	0.52	-	-
			PM	4	45	6,086	33.8	D	-	-	-	-	-	206	206	2.34	-	-
	Between Bird Avenue and SR-87	SB	AM	4	67	6,316	23.6	C	-	-	-	-	-	156	156	1.77	-	-
			PM	4	23	7,378	80.2	**F**	-	-	-	-	-	298	298	**3.39**	-	-
		NB	AM	4	21	6,880	81.9	F	-	-	-	-	-	80	80	0.91	-	-
			PM	4	15	8,662	144.4	F	-	-	-	-	-	22	22	0.25	-	-
	Between SR-87 and 10th Street	SB	AM	4	66	6,388	24.2	D	-	-	-	-	-	48	48	0.55	-	-
			PM	4	26	7,540	72.5	**F**	-	-	-	-	-	260	260	**2.95**	-	-
		NB	AM	4	36	8,328	57.8	**F**	-	-	-	-	-	268	268	**3.05**	-	-
			PM	4	24	8,264	86.1	F	-	-	-	-	-	74	74	0.84	-	-

* Source - Santa Clara Valley Transportation Authority Congestion Management Program Monitoring Study 2001.

disruptions. There may also be some localized congestion due to truck traffic associated with construction, but deliveries will generally occur during off-peak hours. The largest volume of trucks will access the site during excavation and off-hauling activities for the basement construction. It is estimated that a total of 140,000 cubic yards of material will be off-hauled from the site. Assuming the use of trucks that carry 12 cubic yards per load, a total of about 11,650 loads of material would be off-hauled from the site for the below-grade parking. It is anticipated that the required off-hauling will last between four and eight weeks. The size of the site and its location will minimize the need for staging, parking, vehicle queues, and other construction activities to occur in the public streets.

- **Construction impacts will be temporary and are not anticipated to substantially disrupt peak hour traffic. (Less than Significant Impact)**

Bicycle and Pedestrian Impacts

A reasonable assumption for bicycle trip generation will be a one percent mode share. This calculates into 13 to 14 project-generated peak hour bicycle trips. The project is located adjacent to the multi-use (bicycle and pedestrian) trail along the Guadalupe River, which could serve bicyclists. Bicycle racks will be provided in accordance with the VTA design standards. It is estimated that a minimum of 14 racks will be needed to serve the project.

Project pedestrian traffic will be primarily generated by residents and office employee break time trips to downtown stores and restaurants. The existing downtown sidewalks are adequate to serve the anticipated pedestrian demand. The streets serving the project site have existing sidewalks. The project includes new sidewalks along the realigned Delmas Avenue.

The project will provide public access to walkways/trails within the landscaped setback open spaces along Santa Clara Street and the site's Guadalupe River frontage. The project will also provide public access to walkways/trails within the landscaped setback open space along the site's Los Gatos Creek frontage, thereby linking the future VTA LRT station to the Pavilion.

The proposed project will not have a significant adverse impact on the existing bicycle and pedestrian facilities in the project area and no additional improvements will be necessary to serve the project.

- **Development of the project, as proposed will contribute to improved access for both bicyclists and pedestrians in the project area. No significant adverse impacts to either bicycle or pedestrian facilities will result from the project. (Less than Significant Impact)**

Transit Service Impacts

A transit reduction of three (3) percent for office uses and nine (9) percent for residential uses was applied to the proposed project trip generation. This diversion to transit equates to approximately 50 new transit trips during the peak hours. Given that the site is served directly by 11 bus routes plus LRT, these riders could easily be accommodated by the existing service. The closest bus stop is located on Santa Clara Street, west of Delmas Avenue. As noted in the project description, the San Fernando LRT station (part of the

Vasona Corridor LRT project) is currently under construction at the southwest corner of the site, on West San Fernando Street. There are additional existing LRT stations located close to the project site including the Children's Discovery Museum Station on Woz Way (approximately 0.4 miles from the site) and Santa Clara Street Stations on First and Second Streets (approximately 0.6 miles from the site). The Diridon Caltrain and Amtrak depot is located approximately 0.25 miles west of the site at Cahill and West San Fernando Streets. Since the project site is so well served by the existing and planned transit routes in the vicinity, it can be concluded that the proposed project will not have a significant adverse impact on transit service in the area.

- **The project is well served by existing and future transit routes. The project will result in an incremental increase in demand for transit service. There is sufficient capacity in the transit system to accommodate the increased ridership. (Less than Significant Impact)**

Other Transportation Issues

In addition to the intersection level of service calculations and freeway segment analysis, the project traffic analysis also included an analysis of intersection operations for selected signalized intersections, and a review of the proposed project site access. The results of these studies are summarized below and are described in detail in Appendix E.

Intersection Operations Analysis

The intersections operations analysis is based on vehicle queuing for high-demand turning movements at intersections. This analysis provides a basis for estimating future storage requirements at intersections.

The analysis indicated that the estimated maximum vehicle queues for some of the high-demand movements will exceed the planned vehicle storage capacity under project conditions. The following intersections will have inadequate storage capacity to accommodate estimated maximum vehicle queues under project conditions:

- I-280 Northbound Ramps and Bird Avenue (westbound right)
- I-280 Southbound ramps and Bird Avenue (southbound left)
- San Carlos Street and Bird Avenue (eastbound left and westbound left)
- Park Avenue and Montgomery Street (westbound left)

The queue length will increase and overall intersection operation will worsen with the addition of project traffic. The increased queue length will not, however, result in a significant safety impact. For this reason, the operational impacts are not considered a significant traffic impact. Appendix E describes the intersection improvements that are recommended to improve the intersection operations.

- **Project traffic will increase queue lengths for some high-demand movements at four study intersections and the queues will exceed the planned vehicle storage capacity. The increased queue length will not result in a significant traffic safety impact; therefore, it is not considered a significant traffic impact. (Less than Significant Impact)**

Site Access Analysis

A detailed operations analysis was conducted for the segment of Delmas Avenue between Santa Clara Street and San Fernando Street to demonstrate that the proposed project's access requirements could be adequately served within this frontage. An illustrative project access plan for Delmas Avenue was developed for this purpose, and is shown on Figure 17. The conclusions regarding project driveways in this discussion apply specifically to the illustrative site access plan described below. If the project access plan ultimately proposed in the PD permit application differs substantially from the illustrative plan evaluated here, additional traffic operational analyses may be required.

The proposed access plan shown on Figure 17 includes two driveways on Delmas Avenue serving the proposed commercial development east of Delmas Avenue. The proposed residential project west of Delmas Avenue will be served by a single driveway (signalized full access intersection) on Delmas Avenue.

The northern-most commercial driveway is located approximately 300 feet south of Santa Clara Street and is directly opposite the residential driveway. This driveway intersection will be controlled by a traffic signal and will allow full access in and out of each driveway. At this intersection, Delmas Avenue will have one lane on the south leg (a shared left/through/ right-turn lane) and two lanes on the north leg (an exclusive left-turn lane and a shared through/right-turn lane). The LOS operation of this signalized intersection under project conditions is described in Table 10. A second southbound through lane will originate at this intersection.

The southern-most commercial access will be a two-way limited-access driveway (right in and right out) located approximately 450 feet south of Santa Clara Street midway between the northern commercial driveway and the Vasona LRT crossing.

The proposed signal at the Delmas driveways will be coordinated with the adjacent signals at Santa Clara Street and San Fernando Street. Traffic operations along Delmas Avenue also will be affected by LRT signal preemption at the Delmas/San Fernando intersection. Due to the complexity of the transportation network adjacent to the site, a simulation model (CORSIM) was developed to evaluate the traffic conditions in the immediate vicinity of the site. The simulation reflects the effects of signal coordination and periodic light rail vehicle crossings, during which time all other vehicle traffic is stopped, and provides a more accurate estimates of queue lengths at the signalized intersections adjacent the site. The results of the CORSIM analysis indicate that the proposed access will adequately serve the project and will not result in any significant impacts related to traffic operation or safety. The details of the CORSIM analysis are described in the Transportation Impact Analysis, Appendix E of this EIR.

East of Delmas, access will also be provided on San Fernando Street via an unsignalized driveway just east of the planned Vasona LRT crossing (approximately 250 feet east of Delmas Avenue). It will be decided at the time of PD Permit approval whether this access will be service only or full access, and what the configuration will be (it will be some combination of right-in, right-out and left-out). Accordingly, all scenarios are analyzed in the traffic impact analysis for this EIR, which concludes that the LOS, freeway, operational and safety impacts significance conclusions set forth in this EIR are the same under all scenarios.

Because the project may be phased (with the west of Delmas residential development being constructed first), site access and safety impacts were also analyzed based on AM and PM peak hour traffic generated by only the west of Delmas development. Widening of San Fernando at Delmas to provide left turn lanes, and signalization of the driveway on Delmas, between Santa Clara and San Fernando, are not necessary under this scenario. In other words, even without these improvements, site access and safety impacts under this scenario will be less than significant.

The proposed change in alignment (slight bend) of Delmas Avenue would not affect the travel patterns within the study area, because Delmas Avenue would continue to serve as a two-way public street between Santa Clara and San Fernando Streets, with no changes to the intersection locations. The slight bend proposed on Delmas would have an insignificant effect on traffic flow during any time period.

- **With the proposed intersection improvements at West San Fernando Street and Delmas Avenue, the site access is expected to accommodate the project traffic and will not result in significant access or safety impacts related to excessively long traffic queues. (Less than Significant Impact)**

Parking Impacts

The project proposes (at full buildout of 1,025,000 square feet) between about 2,075 and 3,075 parking spaces for the proposed commercial and retail uses east of Delmas Avenue. Proposed commercial parking for the uses east of Delmas Avenue will be provided in structured garages with up to two levels below grade and up to five levels above grade. The exact number of spaces provided will be determined at the PD permit stage, and will be provided within a range of 2.25 to 3.00 spaces per 1,000 square feet of commercial space. Within this range, the parking ratio may be reduced by 10% (i.e., to 2.025 to 2.70 spaces per 1,000 square feet) based on the proximity to the planned LRT station. Up to 10% of the parking requirement may be valet. Access to the parking will be on Delmas Avenue and San Fernando Street.

SJW Land Company currently has a parking agreement to provide 53 parking spaces on the western portion of the site for the *Collier* building (located at 450 West Santa Clara Street). At the time the parking lot on that site is removed, SJW Land Company will be required to find them 53 parking spaces elsewhere for the term of their lease. According to the San José Water Company, the Pavilion has agreed in concept to take over the lease for 53 parking spaces and SJW will assign the contract over to them.[25]

The project includes approximately 570 spaces for the proposed residential uses, which is equivalent to approximately 1.75 spaces per dwelling unit. Parking for the residential space west of Delmas Avenue will be provided in structured garages with up to one level below grade and up to five levels above grade. Access to the parking will be on Delmas Avenue. The exact number of spaces provided will be per the City of San Jose's code and subject to

[25] No contractual agreement has yet been concluded. Janelle McCombs, Director of Real Estate, San José Water Company, written correspondence, October 2002.

the unit mix at the time of development. No off-street parking will be provided for the commercial/retail uses west of Delmas Avenue.

The project will provide adequate parking to serve the proposed commercial and residential uses. As described in Section II, A, ***Land Use***, the project will result in a net increase in commercial parking spaces on the site (2,075 to 3,075 proposed commercial spaces – 730 existing = 1,345 to 2,345 more spaces). It is possible that the SJW Land Company could elect to make some or all of the 2,600 future commercial parking spaces available for Pavilion patron use after 6:30 p.m. Since the project will result in a net increase in commercial parking spaces on-site and will provide sufficient parking to accommodate the proposed uses, the project will result in a less than significant parking impact.

- **The project will result in a net increase in commercial parking on-site and will provide sufficient parking to meet the needs of the proposed uses. (Less than Significant Impact)**

3. Traffic Mitigation

The results of the level of service analysis indicate that the project (at buildout of the commercial development east of Delmas) will have a significant impact at two local City of San José intersections: Bird Avenue/San Carlos Street (PM peak hour) and Delmas Avenue/SB SR 87 Off-Ramp and Park Avenue (PM peak hour). The project is also estimated to have a significant impact on five mixed-flow freeway segments currently operating at LOS F in the vicinity of the project.

CEQA requires that an EIR identify mitigation for each significant impact which might result from the project, and that the EIR distinguish between mitigation proposed to be included in the project, and other mitigation measures which are not proposed, but which might reasonably be expected to reduce or avoid the significant impacts.

Mitigation and Avoidance Measures Proposed by the Project

The project includes the following roadway and circulation improvements to reduce or avoid significant traffic impacts.

Intersection Mitigation Measures

- *Bird Avenue and San Carlos Street.* Add a second northbound left-turn lane. Based on the City's standards, the proposed improvement would satisfactorily mitigate the project's impact on intersection level of service. With the recommended mitigation measure, the intersection would operate at acceptable levels of service. Additional right of way may be required to implement this improvement. A conceptual drawing of the proposed improvement is included in Appendix E of this EIR.

- *Delmas Avenue/San Fernando to Southbound SR 87 Off-Ramp and Park Avenue* Add a second southbound through lane. Based on the City's standards, the proposed improvement will satisfactorily mitigate the project's impact on intersection level of service. With the recommended mitigation measure, the intersection will operate at acceptable levels of service.

As a part of this improvement, the project will also widen Delmas Avenue between San Fernando and Park to provide two southbound lanes. This widening would be made on the east side of the road, next to the Vasona corridor LRT tracks. In order to maintain the existing on-street parking along both sides of Delmas Avenue north of Park Avenue, this improvement would require widening the roadway between San Fernando Street and Park Avenue by two feet. An approximately two feet wide section of right of way (ROW) would need to be acquired in order to maintain the existing sidewalk width. There are no street trees within the public right of way along Delmas Avenue. The affected properties from which additional ROW would be acquired include two privately owned parcels and a parcel owned by Santa Clara County.[26]

If additional right of way cannot be acquired from the private property owners, up to seven (7) on-street parking spaces may need to be eliminated in order to accomplish the proposed mitigation measure. Because the intersection would function at acceptable levels with only a single southbound lane during much of the day, the parking restriction could be implemented during the PM peak hours only. Currently, on-street parking is allowed only by permit and is used by the residents of the adjacent single-family homes and the multi-family residential development on the northwest corner of Delmas Avenue and Park Avenue. The permit parking restriction is in effect 24 hours a day.

The EIR traffic consultant observed the usage of on-street parking along Delmas Avenue between San Fernando Street and Park Avenue on two weekday evenings and one weekend evening after 10 PM, which is the peak parking time for residential uses. Observations conducted on weekday evenings found 4 to 5 vehicles parked in the 7 on-street parking spaces adjacent to the privately owned properties on the east side of Delmas Avenue. On both weekday evenings, there were a sufficient number of on-street parking spaces available for residential use elsewhere on the same block to accommodate the vehicles parked in the spaces that may be eliminated. (It should be noted that the on-street parking spaces available for residential use do not include the spaces adjacent to the *Delmas Market*, which are designated for 12-minute parking between 9 AM and 12 midnight.) Observations conducted on a weekend evening found no vehicles parked in the on-street parking spaces that may be eliminated.

It should be noted that the adjacent residential uses on Delmas Avenue all have off-street parking facilities (driveways and/or garages). Therefore, the on-street spaces are not intended to meet the City's parking requirements for the residential uses. The elimination of on-street parking spaces, if implemented, would result in the increased usage of private driveways and garages and on-street parking spaces elsewhere on the same block. The loss of up to seven on-street parking spaces, however, would not result in any significant environmental impact.

Buildout of the proposed east of Delmas commercial development will be conditioned to implementing the above mitigation. If the applicant cannot acquire the required two feet of right-of-way (ROW), the City will either remove up to seven on-street parking spaces or restrict on-street parking during the PM peak period. A figure showing the proposed Delmas Avenue widening, maintaining on-street parking, is shown on Figure 18. A

[26] The two private properties are at the southeast corner of the Delmas/San Fernando intersection and the next property to the south, and County of Santa Clara property at the northeast corner of the Delmas/Park intersection.

figure showing the proposed Delmas Avenue widening with the loss of seven (7) on-street spaces, is shown on Figure 19.

The planned Vasona LRT Project will widen the segment of Delmas Avenue between Park Avenue and San Carlos Street to provide two southbound lanes with on-street parking on both sides. The mitigation drawing for the proposed improvement is included in Appendix E.

- *West Santa Clara Street/Delmas Avenue* The project will signalize this intersection and the westbound left-turn pocket will be lengthened from 120 to 300 feet.

***Conclusion*:** With implementation of the above mitigation, the project's significant impacts on the signalized intersection Delmas Avenue/ San Fernando to Southbound SR 87 Off-Ramp and Park Avenue, the intersection of Bird Avenue/San Carlos Street, and impact on the unsignalized intersection of West Santa Clara Street/Delmas Avenue will be avoided or reduced to a less than significant level. **(Less than Significant Impact with Mitigation)**

Pedestrian and Bicycle Circulation Improvements

- The project will provide public access to walkways/trails within the landscaped setback open spaces along Santa Clara Street and the site's Guadalupe River frontage. The project will also provide public access to walkways/trails within the landscaped setback open space along the site's Los Gatos Creek frontage, thereby linking the future VTA LRT station to the HP Pavilion.

Conclusion: With the proposed improvements, the project will improve pedestrian and bicycle access in the project area. **(Less than Significant Impact)**

Mitigation for Freeway Impacts

Mitigation for freeway impacts would require adding lanes to the freeways, which is not practical for one development to implement. When project mitigation measures on CMP facilities are not feasible or fail to improve the level of service to the CMP's LOS standard, then a CMP approved Deficiency Plan must be prepared. Pending the adoption of the Countywide Deficiency Plan, a local deficiency plan does not need to be prepared. Instead, *Deficiency Plan Immediate Actions* are required to be implemented as part of the project's approval.

Under these circumstances, Section 10.6 of the May 1998 CMP Guidelines requires implementation of the "Immediate Actions" identified in Appendix D of the guidelines. Implementation of the selected items from the "Immediate Implementation Action List" is therefore recommended. A copy of the list is presented in Appendix E of this EIR. The selection of the final items from the list would be determined by the City of San José. With implementation of these items, project mitigation would be in conformance with CMP guidelines:

- Provide design elements such as well-lit pedestrian/bicycle paths and bicycle racks and lockers near employee entrances to encourage pedestrian and bicycle modes of travel.
- Building entrances should be located as closely as possible to transit connections.

- Designate approximately 2% of on-site parking spaces located near employee entrances for exclusive use by carpools or other high occupancy vehicles.
- Provide public information programs for carpooling and transit use.
- The San Fernando LRT station is currently under construction adjacent to the southwest corner of the site and the Diridon Caltrain and Amtrack depot (with future connections to BART) is located three blocks west of the site.

The proposed developer of the site will implement a Master Transportation Demand Management (TDM) program and will periodically inform the City of the status of the project that may include the following elements:

- Designation of an on-site Transportation Demand Management (TDM) coordinator to implement and monitor utilization of public transportation measures to encourage HOV and other trip diversion programs.
- Provision of physical improvements, such as sidewalks, landscaping, the installation of bus shelters, bicycle parking, the operation of a shuttle to the nearby transit center that would act as incentives for pedestrian, bicycle and transit modes of travel.
- Implement a vehicle-trip reduction program and provide employees with incentives to carpool and/or utilize transit. Transit subsidies through the ongoing VTA Ecopass program will be offered to all employees of the site.
- Provision of emergency transportation for employees who use public transportation.

Mitigation Measures Not Proposed by the Project

Mitigation for Freeway Impacts

- Mitigation of significant project impacts on I-280 and SR 87 freeway segments will require roadway widening to construct additional through lanes. It is not feasible for individual development projects to be responsible for implementing such extensive transportation system improvements. **(Significant Unavoidable Impact)**

Conclusion: With implementation of the TDM measures described above, the vehicle trips generated by the project would be reduced and, therefore, the project's impacts on the regional roadway system would be reduced. The project would still, however, result in significant unavoidable impacts to five I-280 and SR87 freeway segments. **(Significant Unavoidable Impact)**

F. AIR QUALITY

The following discussion is based upon an air quality analysis completed for the project by *Donald Ballanti, Certified Consulting Meteorologist*, in January 2003. This analysis calculated the project's air quality impacts using the trip generation assumptions included in the project traffic analysis prepared by *Hexagon Transportation Consultants*. A copy of the air quality analysis is provided in Appendix F of this EIR.

1. Existing Setting

Air Pollution Climatology

The amount of a given pollutant in the atmosphere is determined by the amount of pollutant released and the atmosphere's ability to transport and dilute the pollutant. The major determinants of transport and dilution are wind, atmospheric stability, terrain and, for photochemical pollutants, sunshine.

Northwest winds and northerly winds are most common in the project area, reflecting the orientation of the Bay and the San Francisco Peninsula. Winds from these directions carry pollutants released by autos and factories from upwind areas of the Peninsula toward San José, particularly during the summer months. Winds are lightest on the average in fall and winter. This is when local pollutants can build up.

Pollutants can be diluted by mixing in the atmosphere both vertically and horizontally. The vertical mixing and dilution of pollutants is often suppressed by inversion conditions, when a warm layer of air traps cooler air close to the surface. During the summer, inversions are generally elevated above ground level, but are present over 90 percent of the time in both the morning and afternoon. In winter, surface-based inversions dominate in the morning hours, but frequently dissipate by afternoon.

Topography can restrict horizontal dilution and mixing of pollutants by creating a barrier to air movement. The South Bay has significant terrain features that affect air quality. The Santa Cruz Mountains and Hayward Hills on either side of the South Bay restrict horizontal dilution, and this alignment of the terrain also channels winds from the north to south, carrying pollution from the northern Peninsula toward San José.

The combined effects of moderate ventilation, frequent inversions that restrict vertical dilution and terrain that restrict horizontal dilution give San José a relatively high atmospheric potential for pollution compared to other parts of the San Francisco Bay Air Basin.

Ambient Air Quality Standards

Both the U. S. Environmental Protection Agency and the California Air Resources Board have established ambient air quality standards for common pollutants. These ambient air quality standards represent safe levels that avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called "criteria" pollutants because the health and other effects of each pollutant are described in criteria documents. Table 12, on the following page, identifies the major criteria pollutants,

characteristics, health effects and typical sources. Table 13 summarizes the Federal and California state ambient air quality standards for the criteria pollutants.

TABLE 12
MAJOR CRITERIA POLLUTANTS

Pollutant	Characteristics	Health Effects	Major Sources
Ozone	A highly reactive photochemical pollutant created by the action of sunshine on ozone precursors (primarily reactive hydrocarbons and oxides of nitrogen. Often called photochemical smog.	• Eye Irritation • Respiratory function impairment.	The major sources ozone precursors are combustion sources such as factories and automobiles, and evaporation of solvents and fuels.
Carbon Monoxide	Carbon monoxide is an odorless, colorless gas that is highly toxic. It is formed by the incomplete combustion of fuels.	• Impairment of oxygen transport in the bloodstream. • Aggravation of cardiovascular disease. • Fatigue, headache, confusion, dizziness. • Can be fatal in the case of very high concentrations.	Automobile exhaust, combustion of fuels, combustion of wood in woodstoves and fireplaces.
Nitrogen Dioxide	Reddish-brown gas that discolors the air, formed during combustion.	• Increased risk of acute and chronic respiratory disease.	Automobile and diesel truck exhaust, industrial processes, fossil-fueled power plants.
Sulfur Dioxide	Sulfur dioxide is a colorless gas with a pungent, irritating odor.	• Aggravation of chronic obstruction lung disease. • Increased risk of acute and chronic respiratory disease.	Diesel vehicle exhaust, oil-powered power plants, industrial processes.
Particulate Matter	Solid and liquid particles of dust, soot, aerosols and other matter which are small enough to remain suspended in the air for a long period of time	• Aggravation of chronic disease and heart/lung disease symptoms.	Combustion, automobiles, field burning, factories and unpaved roads. Also a result of photochemical processes.

TABLE 13 FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS			
Pollutant	**Averaging Time**	**Federal Primary Standard**	**State Standard**
Ozone	1-Hour 8-Hour	0.12 PPM 0.08 PPM	0.09 PPM --
Carbon Monoxide	8-Hour 1-Hour	9.0 PPM 35.0 PPM	9.0 PPM 20.0 PPM
Nitrogen Dioxide	Annual Average 1-Hour	0.05 PPM --	-- 0.25 PPM
Sulfur Dioxide	Annual Average 24-Hour 1-Hour	0.03 PPM 0.14 PPM --	-- 0.05 PPM 0.25 PPM
PM_{10}	Annual Average 24-Hour	50 µg/m3 150 µg/m3	30µg/m3 50 µg/m3
$PM_{2.5}$	Annual 24-Hour	15 µg/m3 65 µg/m3	-- --

PPM = Parts per Million
µg/m3 = Micrograms per Cubic Meter

The Federal and State ambient standards were developed independently with differing purposes and methods, although both processes attempted to avoid health-related effects. As a result, the federal and state standards differ in some cases. In general, the California state standards are more stringent. This is particularly true for ozone and PM_{10}.

Ambient Air Quality

The Bay Area Air Quality Management District (BAAQMD) monitors air quality at several locations within the San Francisco Bay Air Basin. The monitoring site closest to the project site is in downtown San José on Fourth Street. Table 14 summarizes exceedances of State and Federal standards at the downtown San José monitoring site during the period 1999-2001. As shown in Table 14, ozone and PM_{10} exceed the state standards in the project area. Violations of the carbon monoxide standards had been recorded at the downtown San José site prior to 1992.

Of the three pollutants known to at times exceed the State and Federal standards in the project area, two are regional pollutants, ozone and PM_{10}. Ozone and PM_{10} are considered regional pollutants, because concentrations are not determined by proximity to individual sources; rather they show a relative uniformity over a region. Thus, the data shown in Table 14 for ozone and PM_{10} provide a good characterization of levels of these pollutants on the project site.

Carbon monoxide is considered a local pollutant, because high concentrations are normally only found very near sources. The major source of carbon monoxide, a colorless, odorless, poisonous gas, is automobile traffic. Elevated concentrations, therefore, are usually only found near areas of high traffic volumes.

TABLE 14 SUMMARY OF AIR QUALITY DATA FOR DOWNTOWN SAN JOSÉ				
Pollutant	**Standard**	**Days Exceeding Standard in:**		
		1999	**2000**	**2001**
Ozone	Federal 1-Hour	0	0	0
Ozone	State 1-Hour	3	0	1
Carbon Monoxide	State/Federal 8-Hour	0	0	0
PM_{10}	Federal 24-Hour	0	0	0
PM_{10}	State 24-Hour	5	2	2

Source: California Air Resources Board, Aerometric Data Analysis and Management System (ADAM), 2002.

The data shown in Table 14 for carbon monoxide are not necessarily representative of concentrations that would be found near the proposed project site. For this reason, concentrations of carbon monoxide are estimated using a computer simulation model that predicts concentrations based on information on roadway locations, traffic volumes and traffic conditions, when a specific development is proposed and future traffic conditions can be estimated.

Attainment Status and Regional Air Quality Plans

The Federal Clean Air Act and the California Clean Air Act of 1988 require that the State Air Resources Board, based on air quality monitoring data, designate portions of the state where the Federal or State ambient air quality standards are not met as "nonattainment areas". Because of the differences between the Federal and State standards, the designation of nonattainment areas is different under the Federal and State legislation.

The Bay Area had until recently attained all federal standards. In June of 1998 the U.S. Environmental Protection Agency reclassified the Bay Area from "maintenance area" to nonattainment for ozone, based on violations of the Federal standards at several locations in the air basin. This reversed the air basin's reclassification to "maintenance area" for ozone that had occurred in 1995. Reclassification requires an update to the region's Federal air quality plan.

Recent revisions to the national ambient standards for ozone and Particulate Matter have no immediate effect on federal nonattainment planning. Existing ozone and Particulate Matter designations will remain in effect until U.S.E.P.A establishes new designations based on data gathered in 1997, 1998 and 1999. No new controls will be required with respect to the new standards until after the year 2002.

Under the California Clean Air Act, Santa Clara County is a nonattainment area for ozone and PM_{10}. The county is either attainment or unclassified for other pollutants. The California Clean Air Act requires local air pollution control districts to prepare air quality

attainment plans. These plans must provide for district-wide emission reductions of five percent per year averaged over consecutive three-year periods or if not, provide for adoption of "all feasible measures on an expeditious schedule".

Sensitive Receptors

The Bay Area Air Quality Management District defines sensitive receptors as facilities where sensitive receptor population groups (children, the elderly, the acutely ill and the chronically ill) are likely to located. These land uses include residences, schools playgrounds, childcare centers, retirement homes, convalescent homes, hospitals and medical clinics. The closest sensitive receptors are residences located approximately 80 feet south of the site, and park users to the north of the site.

2. Impacts

Thresholds of Significance

According to the Bay Area Air Quality Management District's CEQA Guidelines, for the purposes of this project, an air quality impact is considered significant if the project would:

- contribute to CO concentrations exceeding the State Ambient Air Quality Standard of 9 parts per million (ppm) averaged over 8 hours or 20 ppm for one hour;
- generate criteria air pollutant emissions in excess of the BAAQMD annual or daily thresholds, which are 80 pounds per day (or 15 tons/year) for Reactive Organic Gases (ROG), Nitrogen Oxides (NO_x), and PM_{10}; or
- individually have a significant air quality impact, it would also be considered to have a significant cumulative air quality impact;

The BAAQMD significance threshold for construction dust impacts is based on the appropriateness of construction dust controls. The BAAQMD guidelines provide feasible control measures for construction emission of PM_{10}. If the appropriate construction controls are to be implemented, then air pollutant emissions for construction activities would be considered less than significant.

Construction Impacts

Development of the proposed project would require demolition of existing buildings and parking lots. The physical demolition of existing structures and other infrastructure, as well as the loading of debris into trucks for disposal, are construction activities with a high potential for creating air pollutants.

After removal of existing structures and improvements, excavation and grading operations, construction vehicle traffic and wind blowing over exposed earth would continue to generate exhaust emissions and fugitive particulate matter emissions that would affect local and regional air quality. Demolition and construction activities would temporarily affect local air quality for a period of months, causing a temporary increase in particulate dust and other pollutants. Dust emissions would vary from day to day, depending on the level and type of activity, silt content of the soil, and the prevailing weather conditions. Peak construction activities would involve simultaneous grading and earthmoving over the 8.83 gross acre

project site. The total duration of excavation and off-hauling of dirt for the basement would range between four and eight weeks, depending upon whether loading operations would occur on both sides of Delmas Avenue concurrently, or whether they would occur on one side, then the other. Dust emissions during excavation would increase particulate concentrations near the project site and potentially affect the sensitive receptors directly adjacent to the property.

Construction activities are also a source of organic gas emissions. Solvents in adhesives, non-waterbase paints, thinners, some insulating materials and caulking materials would evaporate into the atmosphere and would participate in the photochemical reaction that creates urban ozone. Asphalt used in paving is also a source of organic gases for a short time after its application.

The effects of construction activities would be increased dustfall and locally elevated levels of PM_{10} downwind of construction activity. Depending on the weather, soil conditions, the amount of activity taking place and nature of dust control efforts, these impacts could extend downwind from the site, creating a temporary annoyance at nearby properties. The Bay Area Air Quality Management District's (BAAQMD) approach to assessing impacts from construction-related air pollutant emissions is based upon whether identified feasible control measures are implemented. Without implementation of the control measures, the construction emissions would be considered significant. Adoption of the measures described below would reduce the impact to a less than significant level

- **Construction activities related to the proposed project would result in significant short-term air quality impacts. (Significant Impact)**

Local Air Quality Impacts

On the local scale, the project would increase traffic on the local street network, thereby increasing the carbon monoxide levels along roadways used by project traffic. Carbon monoxide is an odorless, colorless poisonous gas whose primary source in the Bay Area is automobiles. Concentrations of this gas are highest near intersections of major roads.

Carbon monoxide concentrations at intersections near the project site were projected using the BAAQMD's Guidelines and methods for determining carbon monoxide impacts. A computer simulation model was applied to seven intersections near the project site. These intersections were selected as having the highest predicted traffic delay of the intersections analyzed in the traffic study, based on the total traffic volume or incremental impact of the proposed project. PM peak traffic volumes for these intersections were applied to the CALINE-4 dispersion model to predict maximum 1-and 8-hour CO concentrations, corresponding to the 1- and 8-hour averaging times specified in the state and federal ambient air quality standards for carbon monoxide. The CALINE-4 model and a discussion of the methodology and assumptions for this project are described in Attachment 1 of Appendix F of this EIR.

Table 15 shows the results of the modeling analysis for the peak 1-hour and 8-hour traffic periods in parts per million (PPM). The 1-hour values are to be compared to the federal 1-hour standard of 35 PPM and the state standard of 20 PPM. The 8-hour values in Table 15 are to be compared to the state and federal standard of 9 PPM. Table 15 shows that project

traffic would increase concentrations by up to 0.2 PPM, but concentrations would remain below the most stringent state and federal standards. Since project traffic would not cause any new violations of the 8-hour standards for carbon monoxide, nor contribute substantially to an existing or projected violation, project impacts on local carbon monoxide concentrations are considered less than significant.

TABLE 15
WORST CASE CARBON MONOXIDE CONCENTRATIONS NEAR SELECTED INTERSECTIONS (in PPM)

Intersection	Existing (2002)		Existing + Approved (Background Conditions)		Existing + Background + Project	
	1-Hr	8-Hr	1-Hr	8-Hr	1-Hr	8-Hr
Most Stringent Standard	**20.0**	**9.0**	**20.0**	**9.0**	**20.0**	**9.0**
Almaden/San Fernando	11.5	6.8	11.7	7.0	11.8	7.0
SR 87 Ramps/West Santa Clara	11.3	6.7	11.7	6.9	11.8	7.0
Delmas/West Santa Clara	10.8	6.3	11.0	6.4	11.2	6.7
Autumn/West Santa Clara	11.1	6.5	11.3	6.6	11.3	6.7
Delmas/West San Carlos	10.8	6.3	10.9	6.4	11.1	6.5
Market/West San Carlos	11.4	6.7	11.9	7.1	11.9	7.1

- **Vehicular emissions generated by project traffic would increase localized carbon monoxide concentrations at intersections in the vicinity of the project; however, project traffic would not cause any new violations of the 1-hour or 8-hour standards for carbon monoxide, nor contribute substantially to an existing or projected violation. (Less than Significant Impact)**

Regional Air Quality Impacts

Vehicle trips generated by the project would result in air pollutant emissions affecting the entire San Francisco Bay air basin. Regional emissions associated with project vehicle use was calculated using the URBEMIS7G emission model, as described in Appendix F of this EIR. The incremental daily emission increase associated with the project is described in Table 16 for reactive organic gases, oxides of nitrogen (two precursors of ozone), and PM_{10}.

The BAAQMD has established thresholds of significance for ozone precursors and PM_{10} of 80 pounds per day. The increase in emissions resulting from the project, as shown in Table 16, would exceed the 80 pounds per day threshold for all three pollutants, so the proposed project would have a significant impact on regional air quality.

TABLE 16 PROJECT REGIONAL EMISSIONS IN POUNDS PER DAY			
	Reactive Organic Gases	**Nitrogen Oxides**	**PM_{10}**
BAAQMD Significance Thresholds	**80.0**	**80.0**	**80.0**
Project Emissions	171.0	158.6	86.5

The above conclusion notwithstanding, it is important to note that the nature and location of the proposed project is such that regional benefits to air quality will occur. Specifically, the project proposes relatively high density development at an infill/downtown location adjacent to major existing/planned transit lines that include BART, Caltrain, LRT, Amtrak, and buses. This type of land use planning (i.e., high density infill along major transit lines) is encouraged and recommended in various local and regional plans, including San Jose's General Plan, as a way to minimize the effects of urban sprawl, to reduce congestion and energy consumption, and to improve air quality.

- **Project-generated vehicle emissions of regional pollutants will exceed BAAQMD thresholds and would, therefore, have a significant impact on regional air quality. (Significant Impact)**

3. Mitigation and Avoidance Measures

Mitigation for Construction Impacts

The project would include the BAAQMD list of feasible construction dust control measures that can reduce construction impacts to a level that is less than significant. The following basic control measures would be implemented during all phases of construction on the project site:

- Water all active construction areas at least twice daily.
- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard.
- Pave, apply water three times daily (except during periods of rainfall), or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.
- Sweep daily (preferably with water sweepers) all paved access roads, parking areas and staging areas at construction sites.

- Sweep streets daily (preferably with water sweepers) if visible soil material is carried onto adjacent public streets.

- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.

Mitigation for Regional Impacts

The following measures are included in the project to reduce regional air pollutant emissions.

- Incorporation of site planning features to coordinate building placement, orientation and design in order to create pedestrian-friendly spaces and pathways. Physical improvements, such as sidewalk improvements, landscaping and bicycle parking would act as incentives for pedestrian and bicycle modes of travel.

- Provision of direct, safe, attractive pedestrian access from the project to transit stops and adjacent development.

- Provision of public walkways/trails within open spaces along West Santa Clara Street and Los Gatos Creek, linking the Diridon LRT station with the Pavilion.

- Development of a pedestrian plaza between the Diridon LRT station and the proposed residential building.

- Design and location of buildings to facilitate transit access.

The following mitigation measures are not included in the project, but are recommended by the BAAQMD CEQA Guidelines for future development on the site. One or more of the following measures could be adopted by the project sponsor and/or the project occupants. The BAAQMD CEQA Guidelines identify estimated effectiveness of trip reduction for each of the following measures; in combination, the maximum likely reduction is typically about 15 percent.

- Provide transit information kiosks

- Develop a transit use incentive program for employees, such as on-site distribution of passes, ECCO passes, and/or subsidized transit passes for local transit system.

- Implement feasible travel demand management (TDM) measures for a project of this type. This would include preferential parking for carpools/vanpoools, a ride-matching program, guaranteed ride home programs, coordination with regional ridesharing organizations and transit incentives program.

- Designate an on-site Transportation Demand Management (TDM) coordinator for the project to implement and monitor utilization of public transportation and measures to encourage carpooling and other trip diversion programs.

- Provide emergency transportation of employees who use public transportation. The TDM coordinator will establish policies and programs to reduce and eliminate deliveries and pick-up during peak commute times.

- Encourage and promote telecommuting, to increase the number of employees that telecommute.

- Implement parking cash-out program for employees (non-driving employees receive transportation allowance equivalent to the value of subsidized parking).

- Provide showers and lockers for employees bicycling or walking to work.

- Provide secure and conveniently located bicycle parking and storage for workers.

- Provide on-site shops and services for employees, such as cafeteria bank/ATM, convenience market, etc.

- Provide electric vehicle charging stations in garage.

Conclusion: The adoption of the above measures would have the potential to reduce the regional impacts of the project by perhaps 10-15%. Since reductions of almost 50% would be required to bring regional emissions to a level below the BAAQMD significance threshold, project regional emissions would result in a significant unavoidable impact on regional ozone and PM_{10} air quality. With implementation of the proposed mitigation measures, the construction air quality impacts of the project will be reduced to a less than significant level. **(Significant Unavoidable Regional Air Quality Impact)**

G. NOISE

The following discussion is based upon a noise analysis completed in January 2003 by *Illingworth and Rodkin, Inc.* for the project. This analysis calculated the project's noise impacts using the trip generation and distribution assumptions included in the project traffic analysis conducted by *Hexagon Transportation Consultants, Inc.* A copy of the noise report is presented in Appendix G of this EIR.

1. Existing Setting

Overview

Noise is measures in "decibels" (dB), which is a numerical expression of sound levels on a logarithmic scale. A noise level that is 10 dB higher than another noise level has 10 times as much sound energy and is perceived as being twice as loud. Sounds less than five dB are just barely audible, and then only in the absence of other sounds. Intense sounds of 140 dB are so loud that they are painful and can cause damage with only a brief exposure. These extremes are not commonplace in our normal working and living environments. An A-weighted sound level or dBA filters out some of the low and high pitches which are not audible to the human ear and gives greater weight to the frequencies of sound to which the human ear is most sensitive. For this reason, noise impact analyses commonly use the dBA. Representative outdoor and indoor noise levels in units of dBA are shown in Table 17.

Since excessive noise levels can adversely affect human activities (such as conversation and sleeping) and human health, federal, state and local governmental agencies have set forth criteria or planning goals to minimize or avoid these effects. The noise guidelines are usually expressed using one of several noise averaging methods such as L_{eq}, L_{dn} (also called DNL) or CNEL. Leq stands for the Noise Equivalent Level and is a measurement of the average energy level intensity of noise over a given period of time, such as the noisiest hour. Since the sensitivity to noise increases during the evening and at night -- because excessive noise interferes with the ability to sleep -- 24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The Community Noise Equivalent Level, CNEL, is a measure of the cumulative noise exposure in a community, with a 5 dB penalty added to evening (7:00 p.m. - 10:00 p.m.) and a 10 dB addition to nocturnal (10:00 p.m. - 7:00 a.m.) noise levels. The Day/Night Average Sound Level, DNL, is essentially the same as CNEL, with the exception that the evening time period is dropped and all occurrences during this three-hour period are grouped into the daytime period. For this report, the DNL will be used, since it is consistent with the General Plan guidelines of the City of San Jose.

Effects of Noise

The thresholds for speech interference indoors are about 45 dBA if the noise is steady and above 55dBA if the noise is fluctuating. Outdoors the thresholds are about 15 dBA higher. Interior residential standards for multi-family dwellings are set by the State of California at 45 dBA DNL. Typically, the highest steady traffic noise level during the daytime is about equal to the DNL and nighttime levels are 10 dBA lower. The standard is designed for sleep and speech protection and most jurisdictions apply the same criterion for all residential uses. Typical structural attenuation is 12-17 dBA with open windows. With closed windows in good condition, the noise attenuation factor is around 20 dBA for an older structure and 25 dBA for a newer dwelling. Sleep and

TABLE 17

TYPICAL SOUND LEVELS MEASURED IN THE ENVIRONMENT AND INDUSTRY

At a Given Distance From Noise Source	A-Weighted Sound Level in Decibels	Noise Environments	Subjective Impression
Civil Defense Siren (100')	140		
Jet Takeoff (200')	130		
	120		
Diesel Pile Driver (100')	110		Pain Threshold
	100	Rock Music Concert	
Freight Cars (50') Pneumatic Drill (50') Freeway (100')	90		Very Loud
Vacuum Cleaner (10')	80	Boiler Room	
	70	Printing Press Plant	
Light Traffic (100') Large Transformer (200')	60	In Kitchen With Garbage Disposal Running	Moderately Loud
	50	Data Processing Center	
Soft Whisper (5')	40	Department Store	
	30	Private Business Office	Quiet
	20	Quiet Bedroom	
	10	Recording Studio	
	0		Threshold of Hearing

speech interference is therefore possible when exterior noise levels are about 57-62 dBA DNL with open windows and 65-70 dBA DNL if the windows are closed. Levels of 55-60 dBA are common along collector streets and secondary arterials, while 65-70 dBA is a typical value for a primary/major arterial. Levels of 75-80 dBA are normal noise levels at the first row of development outside a freeway right-of-way. In order to achieve an acceptable interior noise environment, bedrooms facing secondary roadways need to be able to have their windows closed; those facing major roadways and freeways typically need special glass windows.

Regulatory Background

The State of California, the City of San Jose, and the Santa Clara County Airport Land Use Commission (ALUC) have established regulations, plans, and policies which are designed to limit noise exposure at noise sensitive land uses. These include; (1) the State CEQA Guidelines, Appendix G; (2) the California State Building Code; (3) the City of San Jose Noise Element of the General Plan, and (4) the Land Use Plan for Areas Surrounding Santa Clara County Airports.

State CEQA Guidelines

The California Environmental Quality Act (CEQA) has established guidelines to evaluate the significance of effects of environmental noise attributable to a proposed project. Appendix G of the CEQA Guidelines states that a project would normally be considered to have a significant impact if the resulting noise levels conflict with adopted environmental standards or plans, if noise levels generated by the project would substantially increase existing noise levels, if persons would be located within two miles of a public airport and exposed to excessive noise levels, or if persons would be exposed to excessive ground-borne noise or vibration.

CEQA does not define what noise level increase would be considered substantial. Typically, in high noise environments, if the DNL due to the project would increase by more than 3 dBA at noise-sensitive receptors, the impact would be considered significant.

State Building Code

New multi-family housing in California is subject to the environmental noise limits set forth in Title 24, Part 2, of the State Building Code. The noise limit is a maximum interior noise level of 45 DNL. Where exterior noise levels exceed 60 DNL, a report must be submitted with the building plans describing the noise control measures which have been incorporated into the design of the project to meet the noise limit.

City of San Jose General Plan

The Noise Element of the City of San Jose's 2020 Plan identifies noise and land use compatibility standards for various land uses. The City's goal is to, "...minimize the impact of noise on people through noise reduction and suppression techniques, and through appropriate land use policies."

Residential and commercial land uses are considered "satisfactory" up to 60 DNL as the short-range exterior noise quality level, and 55 DNL as the long-range exterior noise quality level. The guidelines state that where the exterior DNL is above the "satisfactory" limit

(between 60 and 70 DNL for residential land uses and between 60 and 76 DNL for commercial land uses), and the project requires a full EIR, an acoustical analysis should be made indicating the amount of attenuation necessary to maintain an indoor level of a DNL less than or equal to 45 dBA (consistent with the State Building Code). Noise levels at residential land uses exceeding 70 DNL require that new development would only be permitted if uses are entirely indoors and building design limits interior levels to less than or equal to 45 DNL. Outside activity areas should be permitted if site planning and noise barriers result in levels of 60 DNL or less. Noise levels at commercial land uses exceeding 76 DNL require that new development would only be permitted if uses are entirely indoors and building design limits interior levels to less than or equal to 45 DNL. Outside activity areas should be permitted if site planning and noise barriers result in levels of 60 DNL or less.

The Noise Element includes the following policies that are relevant to the project:

Policy 1. The City's acceptable noise level objectives are 55 dBA DNL as the long-range exterior noise quality level, 60 dBA DNL as the short-range exterior noise quality level, 45 dBA DNL as the interior noise quality level, and 76 dBA DNL as the maximum exterior noise level necessary to avoid significant adverse health effects. These objectives are established for the City, recognizing that the attainment of exterior noise quality levels in the environs of the San Jose International Airport, the Downtown Core Area, and along major roadways may not be achieved in the time frame of this Plan. To achieve the noise objectives, the City should require appropriate site and building design, building construction and noise attenuation techniques in new residential development.[27]

Policy 5. The City should continue to require safe and compatible land uses within the International Airport noise zone (defined by the 65 CNEL noise contour as set forth in State law) and should also encourage operating procedures which minimize noise.

Policy 9. Construction operations should use available noise suppression devices and techniques.

Policy 12. Noise studies should be required for land use proposals where known or suspected peak event noise sources occur which may impact adjacent existing or planned land uses.

Santa Clara County Airport Land Use Plan

The Santa Clara County Airport Land Use Plan establishes airport noise and land use compatibility standards for development within the vicinity of the airport. CNEL noise contours presented in this plan are used to evaluate land use compatibility for the proposed developments, and the 65 dB CNEL noise contour is recognized as the residential and commercial land use "satisfactory" noise limit for compatible land uses. The 65 dB CNEL

[27] The language in Policy 1 allows the City discretion in approving projects in high noise environments, recognizing that the noise goals may never be attained in noisy areas of the City. The conclusions of the project noise report should not change as a result, yet the City can determine that projects are acceptable, even though the exterior noise goals are not met.

noise contour in the project area from the Santa Clara County Airport Land Use Plan is shown on Figure 20. Residential land uses proposed within the 65 dB CNEL noise contour should be avoided unless they are related to airport service. Commercial land uses proposed within the 65 dB CNEL noise contour and the 75 dB CNEL noise contour should be reviewed carefully to ensure that the noise insulation features to maintain an acceptable interior noise environment are adequate.

Policies adopted by the ALUC that pertain to the project are as follows:

N-1: The CNEL noise contours, which have been developed for San Jose International Airport, shall be used for general guidance in determining suitability for various types of land uses.

N-2: Within the 65 CNEL noise contour at SJIA, the ALUC shall also consider single-event noise exposure levels in addition to the CNEL contours, when determining suitability of new land uses.

N-3: New residential uses within the 65 dBA and 70 dBA CNEL noise contours, which can be classified as infill, will be considered only if it is demonstrated that such structures can be adequately insulated to control interior noise, if the ALUC finds that exterior noise will not be intrusive, and if an avigation easement has been willingly granted to the jurisdiction owning the airport (i.e., City of San Jose).

N–4: New land uses other than residential proposed within areas deemed incompatible are subject to case-by-case review, and can only be approved if the ALUC finds that adequate insulation for control of interior noise levels is designed into the plans and the single-event noise level for that new land use is compatible with the type of use proposed, and does not pose public health or safety issues.

N-7: Establishes the basis for determining the interior noise control required for various land uses located certain distances from aircraft operations at SJIA.

N-8: Establishes the acoustical rating system, Sound Transmission Class (STC) as a guide to the acoustical performance of common building construction elements in determining noise transmission loss.

Existing Noise Environment

The major sources of environmental noise on the project site are vehicular traffic on Highway 87 and the local street network and aircraft. A noise monitoring survey was conducted for this project that consisted of one long-term noise measurement and four short-term noise measurements conducted between August 6, 2002 and August 8, 2002. The noise monitoring locations are shown on Figure 20. The long-term noise measurement (LT-1 on Figure 20) was located at the approximate setback of the nearest proposed residential land uses to Highway 87 and the Norman Y. Mineta San Jose International Airport approach/departure flight-path. Noise levels were monitored continuously at this location over approximately a two-day period. Daytime $L_{eq(hr)}$ noise levels typically ranged from about 64 to 70 dBA while nighttime $L_{eq(hr)}$ noise levels ranged from about 55 dBA to 67 dBA. The calculated DNL at the long-term noise monitoring site resulting primarily from vehicle traffic and aircraft over flights was 70 dBA.

Environmental noise levels were also monitored at two locations on the project site representative of the proposed commercial and residential land uses. Short-term noise measurement site ST-1 was located approximately 305 feet from edge of Highway 87, at the approximate setback of proposed commercial land uses. Site ST-2 was located about 580 feet from the edge of Highway 87 at the approximate setback of the nearest proposed residential land uses. The results of these noise measurements are summarized in Table 18. DNL noise levels generated by transportation noise sources ranged from about 69 to 72 dBA throughout the project site during the noise monitoring survey.

TABLE 18
SHORT-TERM NOISE MEASUREMENT SUMMARY

Measurement Location, Date, and Time	L_{eq} (dBA)	L_{max} (dBA)	L_{01} (dBA)	L_{10} (dBA)	L_{50} (dBA)	L_{90} (dBA)	DNL (dBA)
ST-1 (5 ft.) ~ 305 feet from edge of Highway 87 (August 8, 2002, 14:50–15:00)	62	75	72	63	60	59	69
ST-1 (15 ft.) ~ 305 feet from edge of Highway 87 (August 8, 2002, 14:50–15:00)	64	75	74	65	62	61	71
ST-2 (5 ft.) ~ 580 feet from edge of Highway 87 (August 8, 2002, 15:20–15:30)	63	74	73	67	60	58	70
ST-2 (15 ft.) ~ 580 feet from edge of Highway 87 (August 8, 2002, 15:20–15:30)	65	74	73	68	63	61	72

Future Noise Environment

The future noise environment on the project site would continue to result primarily from transportation noise sources in the project vicinity. Noise generated by vehicular traffic on Highway 87 and local roadways, aircraft, and VTA light-rail trains (currently under construction south of the project site) would contribute to the future noise environment.

2. Noise Impacts

Thresholds of Significance

For the purposes of this project, a noise impact is considered significant if the project would result in:

- exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; or
- exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels; or
- a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project; or

- a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project; or
- residential development located within an airport land use plan; or
- exposure of people residing or working in the project area to excessive noise levels.

The following criteria were used to evaluate the significance of noise and vibration impacts:

Noise and Land Use Compatibility. Land use proposals where existing or future noise levels exceed levels considered "satisfactory" would be considered a significant impact.

Substantial Increase to Noise Levels. CEQA does not define what noise level increase would be substantial. In high noise environments, greater than 60 dBA DNL, such as this study area, the impact would be considered significant if the project increases noise levels by 3 dBA or greater.

Construction Vibration. The construction of the project may be a source of vibration during the construction of the building foundations. A significant impact would be identified if pile driving or other impulsive construction methods would occur within 200 feet of sensitive receptors in the project vicinity.

Construction Noise. Construction activities produce temporary noise impacts. Since these impacts would be short-term and vary considerably day-to-day, they are evaluated somewhat differently than operational impacts. When construction activities are predicted to cause prolonged interference with normal outdoor speech activities in noise-sensitive areas, the impact would be considered significant.

Impacts to the Project

Noise Exposure and Land Use Compatibility

According to the noise contour maps prepared by the Norman Y. Mineta San Jose International Airport (2006 Forecasted Contour), portions of the project site are exposed to existing and future aircraft noise levels exceeding a CNEL of 65 dBA. Commercial uses proposed east of Delmas Avenue would be located within the future 65 dBA CNEL noise contour. The 65 dBA CNEL contour crosses the northeast portion of the residential parcel west of Delmas Avenue (shown on Figure 20). With the realignment of Delmas and the setback from Santa Clara Street, all residential construction may be outside of the 65 CNEL contour. It is possible, however, that portions of the residential development could be within the 65 CNEL contour, depending on the ultimate configuration of the project. Residential development proposed in this area would fall within the noise impact boundary, as defined by the state (Title 24) regulations and local (City of San José General Plan and Santa Clara County Airport Land Use Commission) policies, and would be considered an incompatible land use, however, the project is consistent with the applicable General Plan designation for the site, which was approved by the ALUC.

♦ **The proposed residential and commercial land use within the 65 dB CNEL contour would not be compatible with State of California (Title 24), City of San Jose and Santa Clara County Airport Land Use Commission policies. (Significant impact)**

Project Site Noise Exposure

Residential units proposed on the project site would be subject to noise from aircraft operations, light rail train operations, and traffic noise along Highway 87, Delmas Avenue, Santa Clara Street, and San Fernando Street. The entire site is exposed to noise levels exceeding a DNL of 60 dBA. Future noise levels at the proposed residential units (as situated in the Illustrative Site Plan, Figure 7) would range from about 64 to 74 dBA DNL. Any residential development on the project site would, therefore, be exposed to noise levels exceeding local planning guidelines. Noise levels at residential land uses exceeding 70 DNL require that new development would only be permitted if uses are entirely indoors and building design limits interior levels to less than or equal to 45 DNL. Outside activity areas should be permitted if site planning and noise barriers result in levels of 60 DNL or less, although the General Plan does acknowledge that outside activities can be permitted where these noise levels cannot be achieved due to proximity to the airport.[28] Multi-family residential development in noise environments exceeding 60 dBA DNL is further subject to the requirements of Title 24, Part 2, of the State Building Code previously discussed. This is a significant impact.

Exterior noise levels throughout the commercial project area (east of Delmas Avenue) would range from about 65 dBA DNL to 78 dBA DNL. Future noise levels at the upper stories of proposed commercial buildings with direct line-of-sight to Highway 87 are predicted to be about 78 dBA DNL. Noise levels at commercial land uses exceeding 76 DNL require that new development would only be permitted if uses are entirely indoors and building design limits interior levels to less than or equal to 45 DNL. Outside activity areas should be permitted if site planning and noise barriers result in levels of 60 DNL or less. This is a significant impact.

- **Proposed residential uses on the site would be exposed to exterior noise levels exceeding 60 DNL, which exceeds the threshold for multi-family housing in Title 24, Part 2, State Building Code and the City of San Jose's General Plan noise and land use compatibility standards for residential land uses. The upper stories of the proposed commercial buildings will be exposed to noise levels above the General Plan's "satisfactory" limit of 76 DNL for commercial uses. (Significant Impact)**

Impacts from the Project

Project-Generated Traffic Noise

Based upon a review of the traffic study prepared by *Hexagon Transportation Consultants, Inc.*, traffic noise generated by the project would increase overall noise levels slightly above existing noise levels at the nearest residential receptors south of San Fernando Street. The calculated increase in DNL noise levels resulting from project-generated traffic would range from about 0 to 2 decibels. Given the high existing and predicted future noise environment generated by Highway 87 and the San Jose International Airport, the overall noise level increase resulting from project generated traffic would be less than 2 dBA DNL. This increase

[28] While the City's Residential Design Guidelines encourage provision of open space (i.e., balconies) for each residential unit, the City has determined that, due to the project's location, balconies are inappropriate.

would be below the 3 dBA significance criterion. This increase in noise level would not be perceptible and, therefore, is considered a less than significant impact.

- **Project generated traffic would slightly increase noise levels in the project vicinity; however the overall noise level increases would be less than 2 dBA DNL, which would be imperceptible. (Less than Significant Impact)**

Construction Phase Noise

Construction of the project would generate noise, and would temporarily increase noise levels at existing residential receptors adjacent to the project site, south of San Fernando Street, and at future residential receptors proposed by the project. Noise impacts resulting from construction depend on the noise generated by various pieces of construction equipment, the timing and duration of noise generating activities, and the distance between construction noise sources and noise sensitive receptors. Construction sequencing will consist of demolition of existing structures and other site preparation work, earth-moving, foundation work, and new building erection.

Construction activities generate considerable amounts of noise, especially during the demolition phase and the construction of project infrastructure, when heavy equipment is used. The highest maximum noise levels generated by project construction would typically range from about 90 to 105 dBA at a distance of 50 feet from the noise source. Typical hourly average construction generated noise levels are about 81 dBA to 89 dBA, measured at a distance of 50 feet from a noise source at the center of the site during busy construction periods (e.g., earth moving equipment, impact tools, etc). Construction generated noise levels drop off at a rate of about 6 dBA per doubling of distance between the source and receptor. That is, if construction is generating noise levels of 80 dBA at a distance of 50 feet, the noise level would drop to 74 dBA at a distance of 100 feet. Shielding by buildings or terrain often result in much lower construction noise levels at distant receptors.

Construction activities would be most noticeable at residential land uses along San Fernando Street and Delmas Avenue, south of the site. The closest residences are about 80 feet from the southern edge of the site. All phases of project construction, especially demolition of structures and parking lots, excavation, and the construction of building foundations, would likely exceed the ambient noise environment at these adjacent receptors, and may interfere with normal activities during busy construction periods. For example, construction noise in excess of 90 dBA could result in interior noise levels above 60 dBA, which interferes with normal speech.

Typically, small residential, commercial, or office construction projects do not generate significant noise impacts when standard construction noise control measures are enforced at the project site and when the duration of the noise generating construction period is limited to one construction season (typically one year) or less. Construction noises associated with projects of this type are disturbances that are necessary for the construction or repair of buildings and structures in urban areas. Reasonable regulation of the hours of construction, as well as regulation of the arrival and operation of heavy equipment and the delivery of construction materials, are necessary to protect the health and safety of persons, promote the general welfare of the community, and maintain the quality of life.

Larger construction projects, such as proposed by this project, are typically built out over more than one construction season, and the construction methods used, such as pile driving, generate somewhat higher noise levels and noise that would be considered impulsive. Construction noise impacts primarily result when construction activities occur during noise-sensitive times of the day (early morning, evening, or nighttime hours), the construction occurs in areas immediately adjoining noise sensitive land uses, or when construction durations last over extended periods of time. Limiting the hours when construction can occur to daytime hours is often a simple method to reduce the potential for noise impacts. In areas immediately adjacent to construction, controls such as constructing temporary noise barriers and utilizing "quiet" construction equipment can also reduce the potential for noise impacts.

The structural engineer for the project, *Middlebrook & Louie*, provided the following information regarding pile driving on the project site. It is not known at the time whether the future construction on the site would be built with a mat foundation or pile driving. If pile driving is used, a preliminary estimate of the number of piles and days of pile driving was made, based upon the concept plan and geotechnical information. The following assumptions were used to estimate the number of piles and the days required to drive the piles:

- Site A: Garage, up to 2 levels below, 5 above. Steel office structures above podium to maximum heights and density.

- Site B: Garage, up to 1 level below, 5 above. Concrete structure above podium to maximum heights and density.

- Pile capacity - 100 tons, 70 ft. average length, precast piles.

- Estimated number of piles at Site A: 2,200.

- Estimate number of piles at Site B: 700.

- Total: 2,900 piles.

It is estimated that one pile driving rig could drive an average of up to fourteen piles per day. To drive approximately 2,900 piles, it would take one pile driving rig approximately 207 days (8 hours per day). For a site of this size, however, there would most likely be up to three rigs onsite, if the project was being constructed in one phase. With three rigs, it would take approximately 69 days to drive the 2,900 piles.

The project applicant anticipates that construction of the project would be phased, dependent on market conditions. It is likely that the residential portion of the project would be constructed first, and then the commercial buildings would be constructed, based on market demands. Construction of the exterior portions of the project could expose existing noise sensitive land uses and future noise sensitive land uses built during the first phases of the project to noise levels substantially exceeding the ambient noise environment during periods of construction, which could be phased over several years. Noise generated during pile driving activities would substantially exceed background noise levels in the project vicinity.

- **Construction at the site could result in significant temporary noise impacts to existing and future residences adjacent to the construction areas. (Significant Temporary Impact)**

Construction Vibration Impacts

The detailed construction plans have not yet been determined; however, piles may be required in the building foundations of the structures proposed by the project. Based on estimates provided by the structural engineer, approximately 2,900 piles may be required. As noted above, the duration of pile driving for the entire project (if it is conducted as one phase) would likely range from 69 days to 207 days, depending upon whether three drill rigs or only one drill rig is used.

Pile driving has the potential of generating the highest ground vibration levels and is of primary concern to structural damage, particularly when it occurs within 100 to 200 feet from structures. Other activities during project construction such as use of jackhammers, rock drills and other high-power or vibratory tools and rolling stock equipment (tracked vehicles, compactors, etc.) may also potentially generate substantial vibration in the immediate vicinity. Depending on the proximity of existing structures to the construction area and the methods of construction used, the potential exists to generate high vibration levels. A detailed description of pile driving vibration is included in Appendix G.

Construction activities can cause vibration that varies in intensity depending on several factors. Of all construction activities, use of pile driving and vibratory compaction equipment typically generate high ground-borne vibration levels. Because of the impulsive nature of such activities, the use of the peak particle velocity descriptor (ppv) has been routinely used to measure and assess ground-borne vibration. Peak particle velocity has been used almost exclusively to assess the potential of vibration to induce structural damage and the degree of annoyance for humans.

The two primary concerns with construction-induced vibration, the potential to damage a structure and to interfere with the enjoyment of life are evaluated against different vibration limits. Human perception to vibration varies with the individual and is a function of physical setting and the type of vibration. Studies have shown that the threshold of perception for average persons is in the range of 0.2 to 0.3 mm/sec (0.008 to 0.012 inches/sec), ppv. However, persons exposed to elevated ambient vibration levels such as people in an urban environment may tolerate a higher vibration level.

Structural damage researchers have found safe vibration limits that can be applied to assess the potential for damaging a structure. Vibration limits vary by researcher and there is no general consensus as to what amount of vibration may pose a threat for structural damage to the building. Furthermore, structural damage can be classified as cosmetic only, such as minor cracking of building elements, or it may threaten the integrity of the building. Construction-induced vibration that can be detrimental to the building is very rare and has only been observed for instances where the structure is at a high state of disrepair and when the construction activity occurs immediately adjacent to the structure.

The California Department of Transportation uses a vibration limit of 12.7 mm/sec (0.5 inches/sec), ppv for buildings structurally sound and designed to modern engineering

standards. A conservative vibration limit of 5 mm/sec (0.2 inches/sec), ppv has been used for buildings that are found to be structurally sound but structural damage is a major concern. For historic buildings or buildings that are documented to be structurally weakened, a conservative limit of 2 mm/sec (0.08 inches/sec), ppv is often used to provide the highest level of protection. All of these limits have been used successfully and compliance to these limits has not been known to result in appreciable structural damage. All vibration limits referred to herein apply on the ground level and take into account the response of structural elements (i.e. walls and floors) to ground-borne excitation.

Based on the preceding discussion, 5 mm/sec (0.2 inches/sec) for the San Jose Water office building and all other existing buildings within 200 feet of pile driving activities is recommended as vibration limits to define thresholds of significance for this project. Such vibration levels would be perceptible but would provide proper protection to these buildings against structural damage due to project construction activities.

The San Jose Water office building would be located approximately 100 feet from the nearest pile driving activities. At a distance of 100 feet, peak particle velocities generated by pile driving would be approximately 0.16 inches/sec. The predicted peak particle velocity would exceed the conservative limit often used for historic buildings or buildings that are documented to be structurally weakened. The predicted level would be less than the limit for structurally sound buildings where structural damage is a major concern. Given that the structural integrity of the San Jose Water office building is not known and vibration measurements of pile driving activities on site have not been made, this is a potentially significant impact.

The distance separating pile driving activities at the proposed buildings from other structures in the vicinity (residential land uses south of San Fernando Street) is sufficient such that groundborne vibration levels would not be anticipated to damage these structures. At distances greater than 100 feet, peak particle velocities generated by pile driving would be less than 0.2 inches/sec. Vibration levels may be perceptible but, as with any type of construction, this would be anticipated and it would not be considered significant, given the intermittent and relatively short duration of the phases that have the highest potential of producing vibration (pile driving and use of jackhammers and other high power tools).

- **Project construction could generate vibration levels that may exceed structural vibration limits for the adjacent San José Water building.(Significant Impact)**

3. Mitigation Measures

The proposed project includes the following measures to reduce or avoid noise and vibration impacts associated with its development.

Measures for Project Noise Exposure and Land Use Compatibility

- Prior to issuance of buildings permits for development, the property owner(s) shall grant an avigation easement to the City of San José providing for acceptance of aircraft noise impacts.

- Appropriate noise control treatments (described below) necessary to achieve a compatible interior noise environment (CNEL/DNL 45 dBA) consistent with County ALUC guidelines shall be incorporated into the proposed structures located within the 65 CNEL contour.

- Exterior noise levels shall be reduced through project design elements such as building location/orientation, and shielding, if feasible.

- Interior noise levels within all residential units must be maintained at or below 45 DNL, per the requirements of the City of San Jose, Santa Clara County ALUC, and the State Building Code. The City of San Jose also establishes 45 dBA DNL as the interior noise limit for commercial land uses. Therefore, prior to the approval of PD Permits to construct the project, a qualified Acoustical Engineer will be retained to prepare a detailed acoustical analysis of interior noise exposure. Subject to City review and approval, the acoustical analysis will evaluate the noise reduction requirements and specifications for all project phases, in accordance with State, County and City standards. The analyses should meet the following noise reduction requirements:

    - Interior noise levels shall be reduced to 45 dBA DNL or lower to meet State and local standards. Building sound insulation requirements would need to include the provision of forced-air mechanical ventilation for all new units, so that windows could be kept closed at the occupant's discretion to control noise. Special building construction techniques (e.g., sound-rated windows and building facade treatments) would likely be required for new residential uses. Feasible construction techniques such as these would adequately reduce interior noise levels to 45 dBA DNL or lower.

    - County ALUC guidelines shall be considered to control maximum single-event interior noise levels from aircraft. This requires special building treatments, especially for new residential and commercial uses proposed on the easternmost façades of the buildings. Feasible construction techniques such as sound-rated windows and building façade treatments would adequately reduce interior noise levels to 45 dBA DNL or lower.

Conclusion: Implementation of the above mitigation measures will reduce noise impacts on the project from ambient noise levels to a less than significant level. **(Less than Significant Impact with Mitigation)**

Construction Noise Mitigation

To reduce the noise effects from project construction, the following measures will be implemented during all construction on the site:

- Noise-generating construction activity shall be restricted to between the hours of 7:00 AM to 7:00 PM, Monday through Friday. No construction activities will occur on weekends or holidays.

- A perimeter solid plywood construction barrier, 8 feet high, will be constructed to shield residential land uses south of the project site from construction noise. There should be no openings for site access between the project site and adjacent residential land uses.

- Equip all internal combustion engine driven equipment with intake and exhaust mufflers which are in good condition and appropriate for the equipment.

- Locate stationary noise generating equipment as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project area.

- Route all construction traffic to and from the project site via designated truck routes where possible. Prohibit construction related heavy truck traffic in residential areas where feasible.

- Utilize "quiet" air compressors and other stationery noise sources where technology exists.

- Multiple-pile drivers will be considered to expedite this phase of project construction. Although noise levels generated by multiple pile drivers would be higher than the noise generated by a single pile driver, the total duration of pile driving activities would be reduced.

- Temporary noise control blanket barriers will shroud pile drivers. Such noise control blanket barriers can be rented and quickly erected.

- Foundation pile holes shall be pre-drilled to minimize the number of impacts required to seat the pile.[29] Pre-drilling foundation pile holes is a standard construction noise control technique. Pre-drilling reduces the number of blows required to seat the pile. The associated noise reduction would be based on the soil conditions of the site.

- The contractor shall prepare a detailed construction plan identifying the schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with the adjacent noise sensitive facilities so that construction activities and the event schedule can be scheduled to minimize noise disturbance.

- Designate a "disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and would require that reasonable measures warranted to correct the problem be implemented. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule. (The project sponsor would designate a noise disturbance coordinator post the phone number for the disturbance coordinator, and provide construction schedule notices).

Conclusion: While the above mitigation measures will reduce the noise impacts of general project construction, the phased construction of the project and pile driving could expose existing noise sensitive land uses and future noise sensitive land uses built during the first phases of the project to noise levels substantially exceeding the ambient noise environment during periods of construction, which could be phased over several years. This

[29] "Seating a pile" means placing a pile into the ground deep enough to align it vertically before installing it into the deeper soil.

is a significant and unavoidable temporary noise impact. **(Significant Unavoidable Temporary Impact)**

Construction Vibration Mitigation

The following measures will be implemented at the construction site to reduce the pile driving impact at the San Jose Water office building to a less-than-significant level:

- Vibration monitoring and building surveys should be undertaken prior to, during, and after project construction to document conditions and provide appropriate level of protection for the San Jose Water office building. These surveys shall be performed prior to any construction activity, in regular interval during construction and after project completion. The surveys shall include internal and external crack monitoring in the structure, settlement, and distress and shall document the condition of foundations, walls and other structural elements in the interior and exterior of the said structure. If cracking or other damage is detected during construction, construction shall cease and shoring, bracing, or other methods should be implemented to minimize further damage before construction resumes. The surveys shall be undertaken under the direction of a licensed Professional Structural Engineer in the State of California and be in accordance with industry accepted standard methods. Written reports documenting conditions before, during and after project completion shall be prepared under the supervision and approval of a Structural Engineer, licensed to practice in the State of California. The reports shall clearly identify if damage has occurred and provide all supporting documentation for characterizing areas of potential liability.

Through the use of administrative controls such as notifying neighbors of scheduled construction activities and scheduling construction activities with the highest potential to produce vibration to hours with least potential to affect nearby land uses, perceptible vibration can be kept to a minimum (i.e., would not be excessive) and, as such, would not result in a significant impact. The following measures will be implemented during vibration-generating phases of project construction:

- Construction activity shall be restricted to between the hours of 7:00 AM to 7:00 PM, Monday through Friday. No construction activities will occur on weekends or holidays.

- Notify land uses located within 200 feet of pile-driving activities of the construction schedule in writing.

- The contractor shall pre-drill pile holes to minimize the number of blows required to seat the pile for all piles driven within 200 feet of sensitive land uses.

Conclusion: Incorporation of the above mitigation measures will reduce the vibration impacts of project construction to a less than significant impact. **(Less than Significant Impact with Mitigation)**

H. CULTURAL RESOURCES

The following discussion of archaeological resources is based upon cultural resource evaluations conducted by Basin Research Associates, Inc. for the Vasona Light Rail Corridor EIS/EIR, the Housing Opportunities Phase I EIR, and the Guadalupe River Park EIR.[30] The discussion of historic resources on the project site is based upon a historic evaluation report that was conducted for the project by Basin Research Associates, a copy of which is reproduced in Appendix H of this EIR.

1. Existing Setting

Prehistoric Resources

A prehistoric and historic site records literature search of the project area was conducted as part of the Vasona Corridor Light Rail Project.[31] Additional literature reviews, field surveys, and archaeological testing were conducted along the Guadalupe River portion of the project for the Guadalupe River Flood Control Project and the Park Center Plaza project (Cartier et. Al. 1984, Basin Research Associates, 1991). No formally recorded or known Native American archaeological sites were located on or adjacent to the project site. The potential for exposure of as yet unknown prehistoric archaeological resources is moderate to high, however, given the location between the Guadalupe River and Los Gatos Creek. Buried sites are largely due to sediment deposition as a result of repeated flooding, especially in the vicinity of the Guadalupe River. The historic research completed for the light rail project also indicated a moderate to high potential for significant and/or intact subsurface American Period historic archaeological deposits. This area of San Jose was occupied as early as the 1850's.

Historic Resources

The project site contains two areas of development, the historic San Jose Water Works headquarters and ancillary buildings, located on West Santa Clara Street at the northeast corner of the site, and a single-family residence located mid-block on Delmas Avenue on the western portion of the site.

374 W. Santa Clara Street (San Jose Water Works)

The San Jose Water Works building (on APN 259-38-128) was constructed in 1934. The San Jose Water Works building was determined eligible for the National Register of Historic Places in 1990 and was designated a City Landmark in 1991 (HL 91-57, see Appendix H). A building eligible for the National Register is automatically eligible for the California Register. The building was considered to be significant under criterion A, for its association with the oldest water privately owned water utility in California, and under criterion C, as an excellent example of a distinctive type of office building of its period, combining Moderne and Spanish Colonial Revival elements. The San José Water Company, established in 1866

[30] These cultural resource evaluations are available for public review at the City of San José Department of Planning, Building, and Code Enforcement at 801 North First Street, Room 400, San José, during normal weekday business hours.

[31] Basin Research Associates, Inc., Archaeological Resources Treatment and Monitoring Plan (ARTMP), Vasona Corridor Light Rail Project Santa Clara County, California, for Federal Transit Administration and Santa Clara Valley Transportation Authority, November 2000.

to provide water to San José and neighboring communities, remains in business today under private ownership, which is highly unusual for a water utility. The site of the Water Works building has been occupied by a well field and pumping station since ca. 1880, and the company's office have been located there since 1888. The property is considered to embody the theme of water utilities in the San Francisco Bay Area, which is of paramount importance in the urban development of the region. The San Jose Water Works is listed as a "City Landmark" in the City of San Jose Historic Resources Inventory.

The San Jose Water Works office building is part of a complex that includes the pump house, the transformer house, the data processing building, and the suction basin. The buildings included in the San José Water Works complex are shown on Figure 21. All of these buildings are potentially significant as part of the setting of the main building. The only building in this complex that dates from the construction of the main building or earlier and retains historic integrity is the 1913 transformer house. The other buildings and features were either extensively remodeled in 1984-85, thus lacking historic integrity, or they are modern structures. They are not historically significant. Consequently, the transformer house appears to be the only surviving structure that is significant feature contributing to the main office building. The 1913 transformer house was identified as a significant contributing feature of the Water Works property in the National Register eligibility forms prepared for the property.

45 Delmas Avenue

The house located at 45 Delmas Avenue (on the project site; APN 259-38-039) is a one-story, high-basement Queen Anne style house constructed in 1892. The house was determined to be ineligible for the National Register in 1999 and does not appear eligible for the California Register of Historic Resources, based on the historic architectural resources review completed for the Vasona Corridor Light Rail Project (Basin Research Associates 1999). The house is included in the City of San Jose Historic Resources Inventory as an "Identified Structure" and appears to qualify for listing on the City of San Jose Historic Resources Inventory as a "Structure of Merit," since it received 57 points under the City of San Jose Historic Evaluation Criteria (see Appendix H).

2. Impacts

Thresholds of Significance

For the purposes of this project, a cultural resources impact is considered significant if the project would:

- adversely affect a historic resource listed or eligible for listing on the National and/or California Register, or listed as a City Landmark; or
- cause damage to an important archaeological resource; or
- disturb any human remains, including those interred outside of formal cemeteries.

Impacts to Archaeological Resources

Development of the project would require grading and earthmoving, and substantial excavation for the underground garage levels and building foundations. The potential for disturbing as yet unknown prehistoric sites during construction is considered moderate to high along Los Gatos Creek. Surveys conducted for the Guadalupe River indicate that the potential is low that previously unidentified cultural resources would be found on or near the ground surface. The potential for encountering buried historic resources is considered moderate to high in the project area. If a prehistoric or historic site is encountered during project construction and proper mitigating procedures are not implemented, a significant impact could result.

- **There is a moderate to high potential that grading and excavation for the project could uncover prehistoric or historic archaeological resources. (Significant Impact)**

Impacts to Historic Resources

The parcel that contains the main San Jose Water Company headquarters office building and associated buildings and structures has been determined eligible for the National Register ("Historic Parcel"). The Historic Parcel, located at 374 West Santa Clara Street, is shown on Figure 21 as APN 259-38-128 (refer to Appendix H for an assessor's parcel map of the entire project site). National Register properties are also automatically eligible for the California Register. To determine if a project will have a substantial adverse change on historic resources (a significant effect under CEQA), one must determine whether or not the project will significantly compromise the historic integrity of a particular historic resource. The seven aspects of historic integrity (under the National Register eligibility criteria) include "setting" in addition to aspects of "design" and "materials" related to specific structures (like the main office building). Setting is described in National Register Bulletin 15 as "the physical environment of a historic property." Setting "refers to the character of the place in which the property played its historic role." It involves a property's relationship to surrounding features. "Setting often reflects the basic physical conditions under which a property was built and the functions it was intended to serve."

The main, rectangular headquarters building fronting West Santa Clara Street will remain with the proposed project and will have commercial and/or retail uses, subject to market demand. All other existing buildings, except the transformer house (on APN 259-38-128), will be removed from the site. The proposed project may move the 1913 transformer house or it may be retained in its historic location as a part of the project. The Queen Anne style house at 45 Delmas Avenue (on APN 259-38-039) will be offered with relocation assistance equal to the cost of its demolition to anyone who will move it to a new site. If no one offers to move the house, it will be demolished, following salvage operations. Impacts of the project, therefore, include the moving the 1913 transformer house, construction of new development adjacent to the historic San Jose Water Company headquarters building, and removal of the house at 45 Delmas Avenue. The significance of each of these impacts is described separately below.

Impact to the Transformer House

The project may move the 1913 transformer house, considered the only surviving structure that is a significant feature contributing to the main office building, or it may be retained in its historic location. If necessary, the project would move the transformer house within an area behind or to the side of the main office building that would retain the association between the main office building and the transformer house and, therefore, would not result in an adverse impact to the historic integrity of the transformer house. A site plan showing the recommended relocation area is included in the cultural resources report, Appendix H of this EIR. The transformer house will be rehabilitated according to the *Secretary of Interior's Standards and Guidelines for Rehabilitating Historic Buildings* (U.S. Department of the Interior 1990). Through these measures, the project would result in a less than significant impact to the 1913 transformer house.

- **The project would retain in place, or move and rehabilitate the 1913 transformer house, a significant feature contributing to the main office building. (Less than Significant Impact)**

Impact to San José Water Company Headquarters Building

The San José Water Headquarters building will remain with the proposed project, so potential impacts to this historic resource would be related to the construction of new development in proximity to the historic building.

The project proposes to develop up to 1.025 million square feet of commercial and retail uses on the portion of the site east of Delmas Avenue, and up to 325 residential units and 15,000 square feet of commercial and retail uses on the portion of the site west of Delmas Avenue. While no specific project design is proposed at this time, the future development will be subject to specified design guidelines that are proposed as part of the project. The design guidelines address building setbacks and heights, landscaping, and other features. Land Use Development Standards are included in the project to avoid and reduce impacts to the historic San José Water Company Building are described below. A copy of the proposed Land Use Development Standards is provided in Appendix B of this EIR.

A number of setback zones will be included as part of the design guidelines for the project. The proposed project includes a minimum 50-foot riparian setback from the edge of the Los Gatos Creek and Guadalupe River riparian corridors. No permanent building structures, other than landscaping structures, will be included within the 50-foot setback. Uses within the setback areas will include landscaping, pedestrian trails, and seating areas. Given that the San Jose Water Company building is adjacent to the Guadalupe River, buildings will not be allowed in back of much of the building.

In addition to the riparian setback, there will be a primary setback zone from the San Jose Water Company building of 40 feet. This primary setback zone would be a landscaped plaza and no permanent buildings other than landscape structures will be constructed in this minimum 40 foot setback zone. The buildings in the second setback zone, between 40 and 55 feet from the San Jose Water Company building, will not exceed 45 feet in height. The buildings in the third setback zone, between 56 and 100 feet from the San Jose Water

Company building, will not exceed 70 feet in height. Beyond 100 feet from the San Jose Water Company building, the tower heights will conform to the building envelope requirements (maximum height of 213 feet).

The proposed Land Use Development Standards provide that buildings in the second setback zone, including walls for the parking podium, should be consistent with the architecture, materials, color, etc. of the existing San Jose Water Company building.

A future development designed in conformance with these design guidelines would not result in an adverse impact to the historic integrity of the San José Water Company Building. At the PD permit stage, the final design for the project would be reviewed by the San Jose Historic Preservation Officer and the San Jose Historic Landmarks Commission. A Historic Preservation Permit (Zoning Ordinance §13.48.210) will be required for any alteration or demolition of any structure on the Historic Parcel.

- **The proposed project includes design guidelines that would avoid a significant impact to the historic integrity of the San José Water Company Building. (Less than Significant Impact)**

Impact to the House at 45 Delmas Avenue

Under the proposed project, the house at 45 Delmas Avenue will be offered with relocation assistance equal to the cost of its demolition to anyone who will move it to a new site. If no one offers to move the house, it will be demolished following salvage operations and photo documentation.

The Queen Anne-style house at 45 Delmas Avenue has been determined not eligible for the National Register of Historic Places; nor does it appear eligible for the California Register. The house appears to qualify for listing on the City of San Jose Historic Resources Inventory as a "Structure of Merit" since it received 57 points under the City of San Jose Historic Evaluation scoring criteria developed by the San Jose Historical Landmarks Commission. Removal of the Structure of Merit is not considered a significant impact. A significant CEQA resource is considered a property listed on, or potentially eligible for inclusion on the California Register of Historic Resources, a California Historic Landmark, or a Candidate City Landmark in the City of San José Historic Resources Inventory. Since the house at 45 Delmas Avenue does not meet any of these criteria, it is not considered a significant CEQA resource.

- **The house at 45 Delmas Avenue, which has been determined not eligible for the National Register of Historic Places or the California Register, will be offered with relocation assistance to anyone who will move it off the site. If no one offers to move the house, it will be demolished, following salvage operations and photo documentation. (Less than Significant Impact)**

3. Mitigation and Avoidance Measures

The following measures are included in the project to avoid or reduce mitigate impacts to archaeological resources to a less than significant level:

- Subsurface construction activities within approximately 500 feet of Los Gatos Creek will be monitored by a qualified archaeologist (monitoring is not required for the Guadalupe River). Monitoring reports will be submitted to the Director of Planning, Building, and Code Enforcement.

- If no resources are discovered, the archaeologist shall submit a report to the Director of Planning verifying that the required monitoring occurred and that no further mitigation is necessary.

- If evidence of any archaeological, cultural, and/or historical deposits are found, construction activities will cease and a qualified archaeologist will perform hand excavation and/or mechanical excavation to evaluate the deposits for determination of significance, as defined by the CEQA guidelines. The archaeologist shall submit reports, to the satisfaction of the Director of Planning, describing the testing program and subsequent results and recommendations. These reports shall identify any program mitigation recommended by the archaeologist that the Developer shall be required to complete in order to mitigate archaeological impacts, which may include: resource recovery and/or avoidance testing and analysis; removal; reburial; and curation of archaeological resources.[32]

- In the event that human remains and/or cultural materials are found, all project-related construction shall cease within a 50-foot. Pursuant to Section 7050.5 of the Health and Safety Code and Section 5097.94 of the Public Resources Code of the State of California:

    - In the event of the discovery of human remains during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The Santa Clara County Coroner shall be notified and shall make a decision as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his authority, he shall notify the Native American Heritage Commission who shall attempt to identify descendants of the deceased Native American. If no satisfactory agreement can be reached as to the disposition of the remains pursuant to this State law, then the land owner shall re-inter the human remains and items associated with Native American burials on the property in a location not subject to further subsurface disturbance.

    - A final report shall be submitted to the Director of Planning prior to obtaining Certificate of Occupancy. This report shall contain a list of resources found, a summary of the resources analysis methodology and conclusions, and a description of the disposition/curation of the resources. The report shall verify

[32] It should be noted that CEQA [§21083.2(e)] imposes limits on the time and expense of archaeological work that can be imposed as mitigation.

completion of the mitigation program to the satisfaction of the Director of Planning.

The following design guidelines are included in the project to avoid impacts to the historic San José Water Company building.

The proposed project includes a minimum 50-foot riparian setback from the edge of the Guadalupe River riparian corridor. No permanent building structures, other than landscaping structures, will be included within the 50-foot setback. Uses within the setback areas will include landscaping, pedestrian trails, and seating areas. Given that the San Jose Water Company building is adjacent to the Guadalupe River, no new construction will occur behind much of the building, because the proposed setback extends for most of the building's width.

- There will be a primary setback zone from the San Jose Water Company building of 40 feet. This primary setback zone would be a landscaped plaza and no permanent buildings other than landscape structures (and the transformer building, if relocated) will be constructed in this minimum 40 foot setback zone.

- Buildings in the second setback zone, between 40 and 55 feet from the San Jose Water Company building, will not exceed 45 feet in height.

- Buildings in the third setback zone, between 56 and 100 feet from the San Jose Water Company building, will not exceed 70 feet in height.

- Beyond 100 feet from the San Jose Water Company building, the tower heights will conform to the building envelope requirements (maximum building height of 218 to 264 feet).

In addition to the above design guidelines, the following mitigation measures are included in the project to avoid impacts to the San José Water Company building:

- The buildings in the second setback zone, including walls for the parking podium, should be compatible with the architecture, materials, color, etc. of the existing San Jose Water Company building.

- At the PD permit stage, the final design for the project would be reviewed by the San Jose Historic Preservation Officer and the San Jose Historic Landmarks Commission. A Historic Preservation Permit (Zoning Ordinance §13.48.210) will be required for any alteration or demolition of any structure on the Historic Parcel.

One of the two following measures will be implemented as a part of the project, to reduce and avoid impact to the 1913 transformer house.

- The transformer house will be retained on its historic site and rehabilitated according to the *Secretary of Interior's Standards and Guidelines for Rehabilitating Historic Buildings* (U.S. Department of Interior 1990). New construction in the vicinity of the building should be compatible with its historic character. This mitigation measure would reduce the impact to a less-than-significant level.

- If the transformer house is to be relocated, it will be moved to a different location on the current parcel. Moving the transformer house to a location beside or behind the main office building (within the area recommended by the architectural historian and noted on a map in Appendix H) would retain the association between the main office building and the transformer house and, therefore, would not result in an adverse impact to the historic integrity of the transformer house. The transformer house is a small, wood-frame structure and has been determined feasible to move. The relocated structure would be rehabilitated according to the *Secretary of Interior's Standards and Guidelines for Rehabilitating Historic Buildings* (U.S. Department of Interior 1990). This mitigation measure would reduce potential impacts to the transformer house to a less-than-significant level.

Conclusion: The above measures will avoid or reduce potential impacts to buried archaeological resources, and impacts to the San José Water main office building and 1913 transformer house to a less than significant level. **(Less than Significant Impact with Mitigation)**

I. HAZARDS AND HAZARDOUS MATERIALS

The following discussion is based upon a Phase I Environmental Site Assessment and a Soil and Ground Water Quality Evaluation, prepared by *Lowney Associates*. Additionally, a Geophysical Investigation of the San José Water Company parking lot was prepared by *JR Associates,* to identify possible underground storage tanks and buried metal structures on the site. These reports are provided in their entirety in Appendix I of this EIR.

1. Existing Setting

The project site is made up of many different parcels, which are identified with corresponding addresses in Table 1 of Appendix I of this EIR. The site's elevation ranges from 82 to 87 feet above mean sea level (msl). The area west of Delmas Avenue slope gently to the west towards Los Gatos Creek, and the parcels east of Delmas Avenue slope gently to the east towards the Guadalupe River. Ground water is encountered at approximately 16 to 20 feet below ground surface, and likely flows in northwesterly and northeasterly directions.

Site History

The project site has been developed with a variety of residential, commercial, and industrial uses since at least 1884. Hazardous materials appeared to have been used on the site by previous owners and tenants other than the San José Water Company including a lumberyard, a "pipe dipping" facility, laundry facilities, a sheet metal works, swimming baths, automotive repair shops, and a gas and oil station. Features of concern include above ground storage tanks (ASTs), underground storage tanks (USTs), sumps, pipe yards, artesian wells, production wells, hazardous material storage areas, boilers, engine rooms, pitch kettle, glue rooms, and hot houses.

Existing On-Site Conditions

Parcels West of Delmas Avenue

The western portion of the site is developed primarily as a surface parking lot, with a small parking kiosk, and an associated fenced parking storage area. The center of the site contains a fenced yard and single-family residence (45 Delmas Avenue). At the south end of the western portion of the site, adjacent to Delmas Avenue, there is a fenced electrical equipment area that contains one pad-mounted Pacific Gas and Electric Company (PG&E) transformer and other PG&E electrical equipment.

There are two active San José Water Company water production wells (W1 and W2) on the site area west of Delmas Avenue (refer to Figure 22).

Parcels East of Delmas Avenue

East of Delmas Avenue, the site is primarily a paved parking lot. Development on the northeastern corner of the site consists of the SJW main office building, ancillary buildings, a fenced hazardous materials storage area, an above-grade water storage tank, and a surface parking lot. The southern portion consists of a public parking lot and is separated from the SJW facilities by a chain-link fence that runs in an east/west direction.

There are three active water production wells present on the eastern portion of the project site (Well "R", "P" and "T" on Figure 19). Ten retired wells (no longer in use) are reportedly present on the site area east of Delmas Avenue. Figure 19 shows the location of the existing structures on the site.

Potential Sources of On-Site Impacts

Underground and Aboveground Storage Tanks

Based upon historical documentation, there was once a 3,000-gallon crude oil UST and an aboveground storage gasoline tank (AST) at the San José Water Works facility. It has not been verified that these tanks were removed. Located in the central area of the SJWC main office building are an AST for water and an associated water treatment system. Adjacent to the water AST, in the main building, is a hazardous materials storage room known as the "Booster House" that contains sodium hypochlorite (chlorine) within a 270-gallon AST.

Within a fenced hazardous materials storage area located at the southern end of the SJWC building, is one approximately 500-gallon diesel AST on a concrete slab. Also noted in this storage area was a locked flammable storage cabinet that was not accessible at the time of the hazardous materials investigation.

Additional tanks from former uses on the site include a boiler from the former steam laundry facility and a horizontal boiler. The presence of boilers in the early 1900s may indicate the use of heating oil and, therefore, the presence of heating oil USTs. The presence of another UST was likely at the former gas and oil station on the corner of Delmas Avenue and West Santa Clara Street. Documentation of the boilers and the UST removal was not verified.

Subsequent geophysical studies of the project site were conducted to determine the presence of USTs or other subsurface metallic structures at the former gas, oil, and greasing station near the corner of Santa Clara Street and Delmas Avenue, and at the location of the 3,000-gallon crude oil UST. Results of the geophysical survey indicate that the suspected USTs may not exist in the site. It is presumed that they were removed prior to paving the parking lot, even though documentation regarding their removal was not found.

Other tanks reported at the project site include a dry sump beneath a steel plate approximately 20 feet south of the SJWC building.

Soil Analysis

In December 2001, soil samples at depths of between four to 20 feet were collected from the site. These soil samples were analyzed for total petroleum hydrocarbons in gasoline (TPHg), petroleum hydrocarbons in oil (TPHo), petroleum hydrocarbons in diesel (TPHd), benzene, toluene, ethylbenzene, and xylenes (BTEX), methyl tertiary butyl ether (MTBE), polyaromatic hydrocarbons (PAHs) polychlorinated biphenyls (PCBs), semi-volatile organic compounds (SVOCs) and volatile organic compounds (VOCs).

Soil samples taken near the former auto repair facility, greasing facility, gas and oil station, laundry facility, pipe dipping facility, and the former and/or existing petroleum storage tanks, generally revealed low levels of BTEX, TPHg, TPHd, TPHo and phenanthrene (PAHs). The highest levels of TPHd and TPHo resembled petroleum hydrocarbons in the hydraulic oil-

range and were located in the surficial soil at the former lumber yard (boring SB-18 on Figure 22). The source of the contaminants detected in the shallow soil appears to be minor surface spills. Thus, the vertical and horizontal impacted soil is relatively limited.

VOCs were also detected in deeper soils samples near the boiler room at the former laundry facility, located in the northwest portion of the site (SB-1 on Figure 22). The source of the VOCs appeared to be associated with former dry cleaning activities at the laundry.

Polychlorinated biphenyls (PCBs) and semi-volatile organic compounds (SVOCs) were not detected in any of the soil samples.

Metal concentrations in the shallow soils of the former lumberyard, pipe dipping, and sheet metal facilities exceeded background levels, risk-based screening levels (RBSLs) and residential preliminary remediation goals (PRGs) for chromium, lead, nickel, and thallium. The PRGs for industrial uses were not exceeded. It should be noted that this area is proposed for non-residential uses. Metal concentrations detected at the former lumberyard and sheet metal works facilities generally decreased with depth.

Ground Water Analysis

Analysis of ground water from seven borings taken at selected locations across the site revealed elevated levels of TPHg and TPHd near Well P and Well T (refer to Figure 22). The highest levels of TPHg were present at the former boiler room (SB-13 on Figure 22); and TPHd at the location of the former 3,000-gallon crude oil tank (SB-16). Elevated levels of BTEX and MTBE were also detected above their respective Maximum Contaminant Levels (MCLs) at the former gas and oil station (SB-8), the 3,000-gallon crude oil tank (SB-16), and the former gasoline UST (SB-15). No significant levels of VOCs were detected in the ground water near the former automotive/tire repair shop (SB-4) or the former laundry site (SB-13).

Transformers

Located on the project site are two Pacific Gas & Electric (PG&E) transformers: T-10620, which is located on the east side of the SJWC building; and T-2060, which is located inside an electrical equipment storage enclosure located immediately north of the apartment building at 401 West San Fernando Street. It is unlikely that the transformers on-site contain polychlorinated biphenyls (PCBs), a hazardous substance, since PCBs were banned from further production and use in the mid-1970's.

Asbestos and Lead-based Paint

Since most the buildings on-site were constructed prior to 1980, asbestos-containing materials (ACMs) and lead-based paint may be present in any or all of them. These materials can be harmful, if airborne through demolition or renovation activities.

Sources of Off-Site Impacts

During the Phase I assessment, a regulatory agency database report was reviewed to help establish whether contamination incidents have been reported within one-quarter mile of the site vicinity. A list of the database sources, a detailed description of the sources, and a radius

map indicating the location of the reported facilities relative to the project site are presented in Appendix I of this EIR. None of the reported facilities appeared likely to significantly impact the project site.

2. Impacts

Thresholds of Significance

For the purpose of this project, a hazardous materials impact is considered significant if the project would;

- Create a significant hazard to the public or the environment as a result of the routine transport, use or disposal of hazardous materials; or
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; or
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school; or
- Create a significant hazard to the public or the environment from existing hazardous materials contamination by exposing future occupants or users of the site to contamination in excess of soil and ground water cleanup goals developed for the site; or
- For a project located within an airport land use plan, would result in a safety hazard for people residing or working in the project area.

Potential Sources of On-site Impacts

Hazardous materials were used and stored on the project site by former site owners and tenants, as well as by the SJWC. Previous uses on the site, including a lumber yard, a "pipe dipping" facility, laundry, a sheet metal works, swimming baths, automotive repair shops, and a gas and oil station are all former businesses on-site that likely used hazardous materials. Based on the past site uses, there is a moderate to high probability that localized areas of contamination are present on-site.

Current chemical storage and use at the site appeared limited primarily to diesel and sodium hypochlorite (chlorine) used and stored at the SJWC facility. Although the interior of the "Booster House", where sodium hypochlorite reportedly is stored, was not directly observed, general housekeeping of chemical storage areas appeared orderly with no readily observable evidence of significant spills or leaks.

Soil and ground water testing revealed elevated levels of petroleum hydrocarbons (TPHg, TPHd), BTEX, MTBE, volatile organic compounds (VOCs), and heavy metals including chromium, lead, nickel, and thallium. The presence of hazardous materials in the soil and/or ground water could expose construction workers, the general public, and future residents and users of the site to harmful levels of hazardous materials. It should be noted that the proposed residential uses will be located on the parcels west of Delmas Avenue and office uses will be on the parcels east of Delmas Avenue. Most of the prior industrial use and hazardous materials contamination occurred on the parcels east of Delmas Avenue.

Soil excavated from the site will require special handling and disposal during project construction. Since dewatering will be necessary for the basement construction, any ground water removed shall be sampled and appropriately disposed.

Septic systems may remain from historic developments. These systems, if encountered during site development, must be property abandoned in accordance with applicable regulations.

- **Development of the site could expose construction workers, the general public, future users and residents of the site, as well as occupants of nearby properties, to soils, dust, and/or ground water contaminated by fuels, oils, solvents, and metals. (Significant Impact)**

Water Supply Wells

There are currently three active water production wells and ten "retired" water production wells known to be on-site. Additionally, numerous water production wells were reportedly present on the San José Water Works site during the late 1800s and early 1900s. Due to the historical use of the site for water production, unknown water supply wells and/or artesian wells may be encountered during site development activities. Possible destruction and/or contamination of these wells through accidental discovery would not result in a significant environmental impact, as long as they are subsequently abandoned in accordance with SCVWD requirements.

There are two existing SCVWD groundwater monitoring wells on the site, east of Delmas. The project proposes to remove one of them, which will be properly abandoned per SCVWD requirements.

- **Development of the site could result in the destruction or contamination of unknown water production wells. If not properly abandoned, they could result in potential risks to future construction on the site. (Significant Impact)**

Asbestos and Lead-based Paint

Since most the buildings were constructed prior to 1980, ACMs and lead-based paint may be present in any or all of them. Demolition of these buildings would likely release ACMs into the air and could expose workers and nearby receptors to potential health risks. Prior to issuance of demolition permits by the City, an asbestos survey must be conducted under National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines.

Demolition of buildings which contain lead-based paint could create lead-based dust at concentrations which would expose workers and nearby receptors to potential health risks. State regulations require that air monitoring be performed during and following renovation or demolition activities at sites containing lead-based paint. If the lead-based paint is peeling, flaking, or blistered, it would need to be removed prior to demolition. It is assumed that such paint will become separated from the building components during demolition activities; and must be managed and disposed of as a separate waste stream. If the lead-based paint is still bonded to the building materials, its removal is not required prior to demolition. It is required, however, to follow the requirements outlined by Cal/OSHA Lead in Construction Standard, Title 8, California Code of Regulations (CCR 1532.1) during demolition.

- **Development of the proposed project could result in demolition of buildings containing ACMs and lead-based paint. Demolition done in conformance with Federal and State laws and regulations will avoid exposure of construction workers and/or the public to contaminants, including lead-based paint and asbestos, if those materials become airborne. (Significant Impact)**

Transformers

Pole-mounted transformers were observed at two locations on-site. These transformers may contain transformer oil. Oil leaks can occur from the transformers' reservoirs. Although oil is typically not highly toxic or mobile in the environment, transformer oil may contain polychlorinated biphenyls (PCBs), a hazardous substance. It is unlikely that the transformers on-site contain PCBs, since PCBs were banned from further production and use in the mid-1970's. No leaks from the transformers were observed.

- **Because there are transformers on-site, development of the site may expose construction workers and occupants of nearby properties to transformer oil and mercury. (Significant Impact)**

Potential Off-Site Impacts

Based upon available information, no hazardous material incidents have been reported in the site vicinity that would be likely to significantly impact the site. While several facilities in the vicinity are hazardous materials users, future development on the site is not expected to be impacted by these off-site sources.

- **Future development of the site is not expected to be impacted by off-site contamination sources. (Less Than Significant Impact)**

3. Mitigation and Avoidance Measures

The following mitigation measures are included in the project to avoid and reduce potential impacts due to the presence of hazardous materials in the soil and groundwater.

- Prior to excavation of site soils for the subsurface garage, additional shallow soil characterization shall be performed and a soil management plan shall be completed.

- If impacted soil is excavated during site development activities, it must be segregated and analyzed to evaluate whether it may remain on-site or must require appropriate off-site disposal.

- If soils containing elevated levels of metals will remain in-place following site development, the Regional Water Quality Control Board or the California Department of Toxic Substances Control (DTSC) shall be notified and remedial options, such as capping the impacted area with clean soil or pavements shall be implemented; and a health risk

assessment shall be completed to evaluate potential risks to future commercial and residential occupants.

- Excavation for the proposed subsurface parking garage will require a dewatering plan that includes analysis and proper treatment and disposal of the ground water. Treatment of ground water will either be at the San Jose/Santa Clara WPCP or trucked to another municipal or industrial waste water treatment facility.

- Ground water sampling will be conducted near soil boring location SB-1, the former laundry facility boiler room located west of Delmas Avenue, to determine if groundwater has been affected by the VOCs in the soil.

- Monitoring wells will be installed to establish the ground water flow direction and assist in characterizing the release of VOCs in groundwater at locations SB-4 and SB-13.

- If historic septic systems are encountered during project construction, they will be properly abandoned in conformance with applicable regulations.

The following mitigation measures are included in the project to reduce impacts associated with exposure to ACMs, PCBs in pole-mounted transformers, and lead-based paint during development of the site.

- An asbestos and lead-based paint survey will be conducted for all buildings to be demolished by the project.

- All demolition activities would be undertaken according to OSHA, and EPA standards to protect workers, and offsite occupants from exposure to asbestos and lead based paint. Specific measures include air monitoring during demolition/construction activities which include existing buildings.

- The removal or disturbance of ACMs on the project site would be subject to certain requirements of the Cal/OSHA asbestos standard contained in Title 8 of the California Code of Regulations (CCR), Section 1529. Removal or disturbance of more that 100 square feet of material containing more than 0.1% asbestos must be performed by a registered asbestos abatement contractor. When the asbestos content of a material exceeds 1%, virtually all requirements of the standard become effective. Materials containing more than 1% asbestos are also subject to Bay Area Air Quality Management District (BAAQMD) regulations.

- Building materials classified as hazardous materials would be disposed of in conformance with Federal, State, and local laws.

- The transformers will be tested prior to removal and disposed of in accordance with OSHA and EPA standards.

The following mitigation measure will reduce hazardous materials impacts associated with the presence of known and unknown water production wells.

- Any of the currently active wells proposed to be abandoned, and unknown wells that are discovered during site development, shall be properly abandoned in accordance with applicable regulations of the Santa Clara Valley Water District.

In the event sodium hypochlorite continues to be stored at the SJWS facility, the following mitigation measure is included in the project to ensure that the storage of sodium hypochlorite at the SJWS facility does not result in impacts to the construction workers and future occupants of the site.

- The storage of sodium hypochlorite at the SJWC shall be in conformance with the requirements of a current Hazardous Materials Storage Permit, per Chapter 17.68, of the San José Municipal Code. The Hazardous Materials Management Plan shall be submitted to the San José Fire Department.

Conclusion: Implementation of the above mitigation measures would reduce hazardous materials impacts associated with development of the site to less than significant levels. Adjacent property owners and users would not be exposed to significant levels of hazardous materials as a result of the proposed project development. **(Less Than Significant Impact with Mitigation)**

J. AESTHETICS AND SHADING

1. Existing Setting

Visual Setting

The project is proposed on a primarily vacant, infill site located at the western edge of downtown San José. The site is comprised of two pieces, divided north-to-south by Delmas Avenue, a two-lane arterial. The visual character of the project site is largely one of an undeveloped, paved site that is used as a parking lot. The mature riparian channel of Los Gatos Creek along the western edge of the site and one older single family home provide the only visual interest on the western portion of the site, and the historic San José Water Company building complex provides visual interest at the northeast corner of the site. The Guadalupe River, that forms the eastern edge of the site, is currently under construction for a large flood control project. All vegetation along the project reach of the Guadalupe River has been removed. The elevated Highway 87 structure also runs along the eastern edge of the project site and physically separates the project site from downtown San José. Distant views of the Santa Cruz Mountains are provided looking across the site to the southwest, both at ground level between the trees and development, and from the southbound lanes of the elevated Highway 87.

The vicinity of the project site is currently developed with primarily low-rise residential and commercial structures. One exception to this is the HP Pavilion, a large indoor arena that is approximately 117 feet tall and located across West Santa Clara Street immediately northwest of the site. The Guadalupe River Park Arena Green is located immediately north of the site and a portion of the Guadalupe River park trail is currently under construction east of the site, on the east side of the river.

Existing Shadows

As stated in the Final EIR for the Downtown Strategy Plan 2010, San José experiences moderately cold to very hot temperatures outside during the course of the year. For pedestrians during the fall and winter months when the weather is colder, shadows cast along streets, walkways, plazas, and parks can cause the temperatures to be uncomfortably cold. During the summer months, however, shade along public spaces can ease the heat felt from high temperatures. The Guadalupe River Park to the east of the site and the Arena Green, located on the north side of West Santa Clara Street across from the project site, are the closest public spaces to the project.

The existing San José Water Company building on the project site currently casts a small shadow onto West Santa Clara Street and the Guadalupe River. The shadow cast by the San José Water Company building does not extend across Santa Clara Street to the Guadalupe River Park Arena Green or across to the east side of the Guadalupe River at any time of the year. Because the remainder of the project site is undeveloped (with the exception of parking lots, small ancillary buildings and one single family residence on Delmas Avenue), shadows cast by the few buildings on the site are insignificant and do not affect the streetscape, the Arena Green, or Guadalupe River Park.

2. Impacts

Thresholds of Significance

For the purposes of this project, an aesthetics and shading impact is considered significant if the project would:

- have a substantial adverse effect on a scenic vista;
- substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway;
- substantially degrade the existing visual character or quality of the site and its surroundings;
- create a new source of substantial light or glare which would adversely affect day or nighttime views in the area; or
- substantially shadow public open space, other than street and sidewalk, which in this case equates to causing a 10 percent increase in the shadow effects to the Guadalupe River Park and Arena Green during the fall, spring, and winter months between the hours of 11 AM and 2 PM)[33].

Change in Visual Character

Aesthetic impacts are largely subjective. Individual taste may vary significantly, particularly with regard to architectural style. The proposed project would introduce large new structures on what is now primarily a vacant site. The site will look like a high-density office and residential development. However, the proposed project will not substantially affect a scenic vista; nor will it damage a scenic resource.

Due to the built up nature of the surrounding area, views within the project area are limited. The site is highly visible from the Guadalupe River Park, across West Santa Clara Street and immediately north of the site. The project site is visible from the southbound lanes of the elevated Highway 87 corridor. Views of the site looking west along West Santa Clara Street are blocked by the Highway 87 structure and intervening development. The site is visible looking east down West Santa Clara Street from the vicinity of the HP Pavilion, due to a curve in the road.

In order to evaluate the impacts of the project on the present skyline profile and existing view corridors, photograph simulations of the project were prepared to illustrate the proposed building massing and scale in its surroundings. The simulations are based on the conceptual site plan created by the project architect.

Four vantage points were selected for the photograph simulations to illustrate views of the project from major pedestrian and vehicular approaches. The vantage points are shown on Figure 23. The views are described as follows:

[33] In the Final EIR for the Downtown Strategy Plan 2010, the following are identified as major public open spaces: St. James Park; Plaza of Palms; Plaza Park (Cesar Chavez Park); Paseo de San Antonio; Guadalupe River Park; and McHenry Park.

View 1 (Figure 24): photo taken from the northwest corner of West Santa Clara and Autumn Street – facing east

View 2 (Figure 25): photo taken from the north side of West Santa Clara at Delmas Avenue – facing south

View 3 (Figure 26): photo taken from southbound lane of Highway 87 – facing west

View 4 (Figure 27): photo taken from midblock on Delmas Avenue, south of West San Fernando Street – facing north

Figures 24-27 present each of the four views described above under existing conditions and photographic simulations of how each view would appear with development of the proposed project conceptual site plan.

The proposed project would introduce several new buildings onto what is generally an undeveloped site. The proposed maximum building heights would range from 218 feet above ground level to 264 feet above ground level across the site, from West Santa Clara to West San Fernando Street. As shown on Figure 24, the existing view facing east from the northwest corner of West Santa Clara and Autumn Streets shows some of the taller buildings of the downtown area in the middle background of the picture, with the Guadalupe River park in the foreground on the left side of the photo and the existing two-story Collier building in the foreground on the right side of the photo. In the photo-simulation, the proposed buildings would be substantially larger than the existing *Collier* building, located at the southeast corner of West Santa Clara and Autumn Streets. The larger buildings of the downtown area can still be seen in the background in the middle of the photo, left of the project buildings.

The existing site view on Figure 25 (View 2) shows the one residence and surface parking lot on the western portion of the site, as seen looking south from West Santa Clara Street. The mature Los Gatos Creek channel forms the western site boundary and Delmas Avenue is shown on the left side of the existing view. The photo-simulation of this view shows the proposed residential tower on the right side of the site, with the 50-foot setback from the creek, the curved alignment of Delmas Avenue, and the commercial tower buildings on the left side of Delmas, with lower scale retail development along the street frontage.

The existing view on Figure 26 (View 3) was taking from the southbound lane of Highway 87, looking across the site towards the southwest. The existing view shows the San José Water Company building in the middle of the photo on the south side of West Santa Clara Street, and the *Collier* Building at the curve in the street in the middle background of the photo. The Guadalupe River channel, under construction with a major flood control project, is shown in the foreground next to the San José Water Company building. Existing high-rise development is shown on the left side of the photo, on the east side of Highway 87. In the photo-simulation, the proposed buildings are substantially larger than the existing development on the west side of Highway 87, but are compatible with the development on the east side if Highway 87. The five-story parking podium is approximately the height of the San José Water Company building.

The existing view on Figure 27 (View 4) was taken looking north from mid-block on Delmas Avenue, south of West San Fernando Street. This view shows some of the existing homes that comprise the Delmas Avenue residential neighborhood, which is part of the potential Lake House/Delmas Historic District. Trees of the Arena Green are visible in the background in the middle of the photo. In the photo-simulation, the proposed residential and commercial towers can be seen on each side of Delmas Avenue. The proposed buildings are substantially larger than the existing residences.

As shown on Figure 27, the large office and residential buildings proposed by the project will be readily apparent in views from the small-scale Victorian neighborhood south of the site and will partially block views of the Arena Green trees. Placing several buildings that are over 100 feet taller and larger than anything around it could substantially degrade the existing visual character of the residential neighborhood to the south, if the buildings were not properly designed, in accordance with the City's Residential Design Guidelines.

Figure 28 shows oblique aerial views of the proposed project looking south and southeast. These views show the project from a greater distance and illustrate how it will appear in relation to the buildings of the greater downtown area. These views show that the proposed mass and scale of the project is generally compatible with the high-rise development on the east side if Highway 87. These views show that the proposed project is the first large-scale (with the exception of the Pavilion) development on the west side of Highway 87 and it would represent an expansion of the downtown high-density development area west of the highway.

CEQA, requires that an environmental assessment compare the effects of a project against the conditions on the site as they exist at the time the notice of preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective (CEQA §15125). When compared to existing conditions, the project is substantially larger than the nearby residential neighborhood and the existing San José Water Company buildings when seen from SR 87, West Santa Clara Street, and the Guadalupe River Park. The height and bulk of the project buildings represent a significant visual change, compared with the existing conditions.

The City has approved planning documents that support large-scale buildings at the site and in the area in the future. For example, a General Plan amendment (City File No. GP01-T-03) was adopted in August 2001 that changed the Urban Design policy text for the project site from a building height limit of 120 feet to taller building heights defined by the Federal Aviation Administration for the Norman Y. Mineta San José International Airport. As a result, the proposed buildings will eventually, by comparison, be compatible visually with planned future development in the area.

The project will block views of the Santa Cruz Mountains that currently exist from passing vehicles in the southbound lanes of Highway 87 (refer to Figure 26) and westbound West Santa Clara Street and the Guadalupe River Park Arena Green, looking southwestward across the site. The project will also partially block views of the Arena Green, looking north from the residential neighborhood south of the site.

- **The proposed buildings are substantially larger than existing development on the west side of Highway 87 and will block partial views of the Santa Cruz Mountains. If not properly designed, the proposed buildings could substantially degrade the existing visual character or quality of the site and its surroundings and result in a significant visual impact. (Significant Impact)**

Light and Glare Impacts

Future development on the site will provide outdoor lighting. All new outdoor lighting for the proposed structures would meet the City of San José's outdoor lighting requirements. Outdoor project lighting would generally increase the level of illumination in the area, but would not cause significant spillover onto adjacent properties, or glare. According to the proposed Land Use Development Standards, low-reflective cladding and windows would be used to minimize solar reflection and daytime glare off of the buildings.

The 10-14 story tall buildings will have lighted windows on the building facades. Light spillover from normal indoor lighting of the proposed buildings should not create a significant visual intrusion to existing residences south of West San Fernando Street. The nearest residence is approximately 80 feet south of the closest building, which should be far enough away to not be affected by any light spillover. The same windows create an increased likelihood of reflected glare affecting nearby roadways, such as SR 87 and for aircraft approaching the Norman Y. Mineta San Jose International Airport. The low-reflective cladding and windows included in the proposed Land Use Development Standards will ensure that glare impacts to passing vehicles and aircraft are less than significant.

The addition of artificial light resulting from the project will have no adverse affect on wildlife species that may use the aquatic habitat of Los Gatos Creek, because Los Gatos Creek is deeply incised in the project reach. The shape of the channel will prevent any exterior lighting from the project site from shining on the water, unless it was aimed directly into the creek. Project design in conformance with the proposed Land Use Development Standards will ensure that site lighting would be designed and located to avoid light and glare impacts to wildlife within the creek channels. Cars will be parked within parking structures that have half walls on each level. This will prevent headlights for shining directly into the riparian corridor. For these reasons, the project lighting will have a less than significant impact on wildlife in the adjoining creek channels.

- **The proposed office buildings may result in light spillover onto adjacent properties and increase reflected glare. The distance between the project buildings and the nearest residences and the low-reflective cladding and windows included in the proposed Land Use Development Standards will ensure that spill light and glare impacts are less than significant. Project lighting will have a less than significant impact on wildlife species using the adjacent channels, since light spillover will not occur within the riparian corridor. (Less than Significant Impact)**

Shading Impacts

Shadows cast by the proposed buildings will not affect the closest residential neighborhood, the Delmas Avenue neighborhood south of West San Fernando Street, because the project site is located north of this area. Shadows cast by the project will extend to the west in the early morning, to the north at midday, and to the east in the late afternoon. At no time will the project shadows fall on the residential area to the south of the site.

The Final Downtown Strategy Plan EIR identifies six major open space areas within Downtown where future development could result in shade and shadow impacts.[34] One of the six open space areas is the Guadalupe River Park, which is directly across West Santa Clara Street, north of the project site. The Final Downtown Strategy Plan EIR states that shade is considered to constitute a negative environmental impact during the cooler months (fall and winter) and is generally a benefit during the hot summer months. The EIR further identifies the times of day that have the most significant shadow impacts, which are centered around midday hours (11 AM to 2 PM). These hours are considered most important, because it is when most pedestrians, including both workers and residents, are likely to eat lunch, run errands, and/or stroll through the open spaces.

During December, shadows are the longest, because the sun is relatively low on the horizon (as shown on Figures 29 and 30). A project's shadow impacts may be greater in the spring and fall equinoxes than at the winter solstice in December, however, because often in December much of the ground is already shaded. In the case of the project, with proposed buildings substantially taller than those surrounding it, shadow impacts are also greatest in December. Shadows cast by buildings in the summer months (June) are minimal, because the sun is at its highest point in the sky.

To analyze the shade/shadow impacts of the proposed project, a shade and shadow study was conducted for the shortest day of the year, December 21, at 11:00 AM, 12:00 PM, 1:00 PM, and 2:00 PM, to illustrate the shadows that would be cast on the Guadalupe River Park and Arena Green by the proposed buildings in the worst case scenario. Shadow impacts were also projected for the fall and spring equinoxes, March and September 21st, at the hours of 11:00 AM, 12:00 PM, 1:00 PM, and 2:00 PM. The portion of Guadalupe River Park and Arena Green evaluated for the shadow impact totals 503,140 square feet (sf. [35] The Arena Green park area north of West Santa Clara Street totals 455,140 sf and is bounded by West Saint John Street on the north, Highway 87 on the east, West Santa Clara Street on the south, and Autumn Street on the west (not counting the River Street right-of-way). The portion of the Guadalupe River Park east of the site, between West Santa Clara and San Fernando Streets totals 48,000 sf.

[34]. Ibid.

[35] This area does not include the square footage of the water corridors of Guadalupe River and Los Gatos Creek, or the parking lot east of the creek trail, because these areas are not considered public park and/or open space.

Since the proposed project consists of a land use plan and building envelopes (refer to Figure 3), rather than specific building designs, the shadow analysis evaluated both a shadow cast by the maximum building envelope, as well as the shadow cast by the buildings in the conceptual site plan (Figure 7). It is important to note that the maximum building envelope could never be built under the proposed PD zoning (which permits 1.025 million square feet east of Delmas and 325 residential units west of Delmas); it would take approximately two (2) million square feet east of Delmas and about 1,000 residential units west of Delmas to build out the entire maximum building envelope. The results of the shadow impact assessment, in terms of square footage of park shaded during the midday hours, are shown in Table 19 for the winter (December 21) shadows, and Table 20 for the spring/fall (March/September 21) shadow. The winter midday shadows cast by the maximum building envelope and the conceptual site plan are shown on Figures 29 and 30, respectively. The spring/fall shadows cast by the maximum building envelope and the conceptual site plan are also shown on Figures 29 and 30, respectively.

As shown on Figure 29, in the winter the midday shadow cast by the maximum building envelope would extend northward into the lower half of the Arena Green and would cover the Guadalupe River Park trail east of the site by mid-afternoon (2:00 PM). In the winter (December 21), shadows cast by the maximum building envelope would cover an average of about 15.1% of the Guadalupe River Park trail east of the site and the Arena Green north of the site (refer to Table 19). The conceptual site plan would cast a smaller winter shadow, covering an average of 10.0% of the park areas east and north of the site. Therefore, a future development allowed by the project may result in a significant shading impact.

TABLE 19
SHADE/SHADOW ANALYSIS OF LAND USE PLAN MAXIMUM BUILDING ENVELOPE& CONCEPTUAL SITE PLAN ON GUADALUPE RIVER PARK & ARENA GREEN
WINTER SOLSTICE (DECEMBER 21)

Hour	Maximum Building Envelope Shadow (in square feet)	Percentage of Park*	Conceptual Site Plan Shadow (in square feet)	Percentage of Park*
11:00 AM	60,945	12.11%	34,400	6.84%
12:00 PM	57,000	11.33%	31,570	6.27%
1:00 PM	88,110	17.51%	59,010	11.73%
2:00 PM	98,270	19.53%	76,660	15.24%
Average Increase	76,081	15.10%	50,410	10.00%

***Note:** The portion of Guadalupe River Park and Arena Green evaluated for the shadow impact totals 503,140 square feet (sf).

In the fall and spring months (March and September 21), the maximum building envelope would cast a midday shadow that would just cross over West Santa Clara Street and reach the Arena Green. Fall and spring shadows would cover the Guadalupe River Park trail east of the site in the afternoon (refer to Figure 29). As shown in Table 20, the spring/fall midday shadow cast by the maximum building envelope would cover an average of just over one percent (1.20 percent) of the total park area. The spring/fall midday shadow cast by the

conceptual site plan buildings would cover even less of the park area, covering an average of 0.63% of the Arena Green and Guadalupe River Park trail east of the site.

TABLE 20
SHADE/SHADOW ANALYSIS OF LAND USE PLAN MAXIMUM BUILDING ENVELOPE& CONCEPTUAL SITE PLAN ON GUADALUPE RIVER PARK & ARENA GREEN
FALL/SPRING EQUINOX (MARCH/SEPTEMBER 21)

Hour	Maximum Building Envelope Shadow (in square feet)	Percentage of Park*	Conceptual Site Plan Shadow (in square feet)	Percentage of Park*
11:00 AM	4,990	0.99%	4,220	0.84%
12:00 PM	5,465	1.09%	4,550	0.90%
1:00 PM	3,350	0.67%	2,610	0.52%
2:00 PM	10,470	2.08%	1,375	0.27%
Average Increase	6,069	1.20%	3,189	0.63%

***Note:** The portion of Guadalupe River Park evaluated for the shadow impact totals 503,140 square feet (sf).

As indicated in Table 19, the maximum building envelope and illustrative site plan would result in an increase of ten percent (or more, in the case of the maximum building envelope) shaded area to the Arena Green north of the site and Guadalupe River Park trail east of the site during the winter (December 21) midday hours (11:00 AM to 2:00 PM). Buildout of the proposed maximum building envelope and illustrative site plan, therefore, would result in a significant shading impact.

- **Buildout of the proposed maximum building envelope would shade more than ten percent of the Arena Green and Guadalupe River Park trail adjacent to the site during the midday hours around the winter solstice, which is considered a significant shading impact. (Significant Impact)**

3. Mitigation

The project includes the following mitigation measures to reduce visual impacts to a less than significant level.

- The conceptual plan submitted to the City of San José for the PD rezoning of the project site is intended to assure a minimum level of aesthetic quality. Specific structures proposed in the future will be reviewed by City staff for conformance with the standard established by the PD Rezoning. Conformance with the PD Zoning proposed by the project will require that the project include design and aesthetic qualities that would conform to City guidelines and would ensure that the appearance of the project is consistent with acceptable aesthetic standards. While there is no way to avoid the visual change that will result from development of the project, conformance with the City guidelines included in the PD Zoning will ensure that the proposed development will not substantially degrade the existing visual character or quality of the site and its surroundings.

- Future development under the PD Zoning proposed by the project will conform to the City's adopted Commercial Design Guidelines.

- Future development on the site will use low-pressure sodium lighting for outdoor uses, in compliance with City Council Policy 4-3, which would reduce the potential for night-time glare. It is noted that the project area has allowances for high-pressure sodium lighting on West Santa Clara Street.

- The future development will be subject to design review by the Planning staff, which would ensure that external building materials are used that minimize reflected glare and that are compatible with the architectural styles and materials of nearby buildings.

Conclusion: While there is no way to avoid the visual change that will result from development of the project, conformance with the City's adopted Commercial Design Guidelines and Residential Design Guidelines, and the Land Use Development standards included as part of the project will ensure that the proposed development will not substantially degrade the existing visual character or quality of the site and its surroundings. The mitigation measures described above will further reduce the project's light and glare impacts. **(Less than Significant Impact with Mitigation)**

Without defining a size restriction on a future project design (which may be inconsistent with City goals and policies calling for dense in-fill development on the project site), there are no measures that could be incorporated into the project that would avoid the significant shading impact. **(Significant Unavoidable Shading Impact)**

K. UTILITIES & SERVICE SYSTEMS

1. Existing Setting

The project is located within the urbanized City of San José and all urban service are currently provided to the site.

Electricity, Natural Gas and Telephone Service

Electricity and gas are provided to the project site by the Pacific Gas and Electric Company (PG&E). It is anticipated that adequate electricity and natural gas services are available to serve the site.

Pacific Bell presently provides communication services to the project site.

Water Service

Water Service is provided to the project site by the San José Water Company, a water retailer of the Santa Clara Valley Water District. The Santa Clara Valley Water District sells wholesale treated water and groundwater to major public and private water retailers that serve Santa Clara County. The District also provides water directly to the agricultural community and others who have private wells.

In 1999, the water use of municipal and industrial (M&I) retailers was 313,000 acre feet.[36] The San José Water Company is the largest retailer of water for the District. In 1999, the San José Water Company purchased 152,084 acre-feet of water from the District.

On-Site Wells

There are 15 wells associated with San José Water Company located on the site. Ten of the wells are listed as retired. The remaining wells, known as Wells 1, 2, P, R, and T are used to provide drinking water to San José

Storm Drainage

The urbanized areas of the City discharge storm runoff into local storm drains, which then empty into local creeks and waterways. The existing storm drainage system currently conveys the storm runoff adequately; however, minor flooding can occur when catch basins or storm lines become clogged with debris, when the storm drain system does not have the capacity to accommodate the runoff, or when high water levels in creeks prevent adequate storm drainage.

The City of San José owns and maintains municipal storm drainage facilities throughout the City. Storm drain lines are inspected and maintained by the Department of Transportation , and are installed, rehabilitated, and/or replaced by the Department of Public Works. The General Plan level of service policy for storm drainage in the City is to minimize flooding on public streets and to minimize property damage from stormwater.

[36] An acre-foot is the volume of water needed to cover one acre of land one foot deep. One acre-foot is equivalent to 325,828 gallons.

The project site is virtually completely paved and drains to existing outfalls in Los Gatos Creek and the Guadalupe River. While development of the proposed project would result in more intense development than presently exists or would be allowed by the existing zoning, the new development will include landscaping and open space areas that will replace some of the existing impervious areas. Therefore, the project will result in an overall decrease in the amount of runoff produced by the site.

Sanitary Sewer Service/Wastewater Treatment

An extensive system of sanitary sewer lines is owned and maintained by the City of San José. Sewer lines are inspected and maintained by the Department of Public Works. The concept of sanitary sewer level of service applies to the quantity of wastewater flowing through a sewer line relative to its design capacity. The General Plan calls for a Level of Service D for sanitary sewer lines, which represents a free flow of wastewater sufficient to prevent "back up" problems. New development is required by existing policies to avoid or minimize its impacts upon any existing or anticipated LOS E sewer lines by construction or contributing to the construction of new lines, or by waiting for completion of planned sewer line improvements.

There is an existing 24-inch sanitary sewer line in West San Fernando, a 10-inch sanitary line in Delmas Avenue, and a sanitary line in West Santa Clara. There is a small amount of sewage generated by the existing single family residence and the San José Water Company facility on the site.

The San José/Santa Clara Water Pollution Control Plant provides wastewater treatment for the project area. The Plant is a regional facility located in North San José and provides tertiary treatment of wastewater from several surrounding cities and sanitation districts. The Cities of San José and Santa Clara jointly own the facility, but the City of San José operates and maintains the Plant.

During the average dry weather period (May 1 through October 31), the Plant is permitted to treat up to 167 million gallons per day (mgd) influent flow. The average dry weather influent flow (or peak week flow) is determined as the highest average flow during any five-weekday period between the months of June through October. For the year 2000, peak week flow was approximately 135 mgd and occurred in May. The Plant's treatment capacity of 167 mgd is allocated between the several agencies served and the two co-owners through Master Agreements. The total capacity allotted to the City of San José is approximately 106.39 mgd.

In 1989, the San Francisco Bay Regional Water Quality Control Board ordered the Plant to reduce its discharge of metals (copper and nickel) by more than 50% to protect aquatic organisms and meet the State and Federal water quality objectives in south San Francisco Bay. In addition, the Regional Board imposed a 120 mgd flow trigger and required the Plant to reduce the quantity of effluent discharged to avoid converting the habitat of two endangered species: the salt marsh harvest mouse and the California clapper rail.

To address these concerns, the Regional Board incorporated the following programs as a condition of the Plant's 1998 National Pollution Discharge Elimination System (NPDES) Permit, as described below:

- Continue implementing the San José Action Plan that incorporated activities designed to reduce the effluent flow to under 120 mgd, including water conservation, reclamation, wetland mitigation, industrial water recycling, and increased public education.

- Develop and implement a Contingency Plan to provide ample assurance that the effluent flows of the Plant are brought to and remain below 120 mgd. The Contingency Plan adds new measures, in a tiered format, aimed at controlling discharges of concern.

Solid Waste Service

Collection of solid waste and recycling from multi-family residential development is provided by GreenTeam, in San José. Residential waste is disposed at the Newby Island Sanitary Landfill.

Industrial and commercial solid waste collection in San José is provided by a number of non-exclusive service providers and the waste may be disposed at any of the four privately owned landfills in San José. The existing disposal facilities in San José include the Newby Island Sanitary Landfill, Guadalupe Mines Rubbish Disposal Site, Kirby Canyon Sanitary Landfill, and Zanker Road Disposal and Recycling Center. According to the Source Reduction and Recycling Element prepared for the City of San José and the countywide Integrated Waste Management Plan, there is sufficient landfill capacity for the needs of Santa Clara County for at least 22 more years.

Recycling services are available to most businesses from private recyclers. The City of San José Environmental Services Department also offers information and assistance to businesses wishing to recycle, or expand their recycling activities.

Assembly Bill 939 established the California Integrated Waste Management Board and required all California counties to prepare integrated waste management plans. AB 939 also required all municipalities to divert 25 percent of their solid waste from landfill disposal by January 1, 1995. Fifty percent of waste stream must be diverted by the year 2000. The City of San José currently generates approximately 1,454,800 tons of solid waste annually, and diverts about 44 percent through a variety of waste diversion programs including curbside recycling and yard waste pick-up.

The existing uses on the site generate a small quantity of solid waste.

2. Impacts

Thresholds of Significance

For the purposes of this EIR, a utilities and service system impact is considered significant if the project would:

- exceed published Federal, State, or local standards relating to solid waste or litter control; or
- directly affect a major utility line or facility; or
- result in a substantial increase in the demand for public services requiring new or physically altered government facilities, the construction of which would cause environmental impacts, to maintain acceptable service; or

- use fuel, water or energy in a wasteful manner; or
- result in an exceedance of the capacity of a utility line or public service to such an extent as to create a safety or public health hazard.

Electricity, Natural Gas and Telephone Service

Facilities for providing telephone, electrical, and natural gas services are built and maintained by the private utilities that provide these services under their franchise agreements with the State of California. New and expanded facilities are paid for from capital funds financed by fees paid by users. All of the utility providers monitor growth patterns and plans of the urban jurisdictions in Santa Clara County, including the City of San José. The utility providers have sufficient capacity to serve the project.

♦ **Development of the proposed project is not expected to exceed the capacity of electricity, gas, and telephone service providers. These providers have sufficient capacity to serve the project. (Less Than Significant Impact)**

Water Supply

Development of the project would create a demand for approximately 13,650 gallons per day (GPD) of water for the office use, 4,745 GPD of water for the retail uses, and approximately 29,046 GPD for the residential uses.[37] The total water use for the project, therefore, would be 47,441 GPD.

According to Article 10910 of the California Water Code, adopted January 1, 2002, EIRs are to evaluate whether a public water supplier has an adequate source of water for any new residential/commercial development with more than 1,000 occupants. The assessment is to evaluate the availability of water to serve the project over a 20-year period, including a normal year, single dry year, and multiple consecutive dry years. The Santa Clara Valley Water District (SCVWD) makes this assessment.

The SCVWD's Urban Water Management Plan has calculated its water demand projections through the year 2020, using a computer program for developing residential demand projections and the latest versions Association of Bay Area Government (ABAG) demographic data and water use data.[38] Given that the ABAG projections are based upon each City's General Plan demographic data and the proposed project is consistent with the site's General Plan designation, the water demand estimated for the project should be included in the overall water demand calculations of the Santa Clara Valley Water District.

The Urban Water Management Plan describes the secured water contracts (Hetch-Hetchy) that ensure the reliability of water for wet, long term average, single dry and critical dry years. The Plan concludes that there is sufficient water to meet the long term demand.

[37] The water rate was based on 0.073 GPD/square foot (sf) x 65,000 sf of retail; 0.0140 GPD/sf x 975,000 sf for office; and [(N-8) x 80] + 2000 GPD/acre for the residential uses, where N = number of residential units per acre. There are 2.24 acres of residential use, so 325 units over 2.24 acres = 145 units/acre – 8 = 137 X 80 = 10,967 +2,000 = 12,967 gallons/day/acre X 2.24 acres = 29,046 gallons/day. Source: City of San José Water Generation Rates, San José Public Works Department.

[38] Santa Clara Valley Water District, Urban Water Management Plan, April 2001.

Although the Water District's water demand calculations were completed before the most recent General Plan Amendment was adopted for the site (which increased the permitted residential density on the west of Delmas parcel), in the overall planning of City's demands, some sites will be developed at higher densities and some sites will be developed at lower densities. The site has been designated for urban uses for many years. High density residential development demands less water per unit, than lower density single family residential development. Future land use changes will result in increases and decreases in the City's water demands. The overall projected water demand for the City's uses should not be substantially affected by the eight acre project site.

The proposed project will not use water in a wasteful manner and water-conserving features will be incorporated into the indoor and outdoor areas of the project, including, but not limited to, low flow fixtures and drought tolerant landscaping.

Impacts to Existing On-Site Wells

The project site is developed with five active San José Water Company (SJWC) wells that provide a primary source of downtown San José's water supply. According to SJWC's chief engineer, an area with a 50-foot radius and 50-foot overhead clearance is required around an active well, in order to be able to use a crane derrick in it for maintenance purposes.[39] For this reason, development of the proposed project will likely require abandonment of some or all of the existing active wells on-site. San José Water Company currently has back-up wells to the wells that are on the project site. They have over 150 wells in the Santa Clara Valley subbasin.[40] San José Water Company would drill a new well within one to two miles of the site, to replace any active well that is displaced by the project. In this way, SJWC would continue to provide sufficient water to serve the downtown service area. According to SJWC, they do not need to own the property to drill and operate a well on a parcel; they can either lease the property or obtain an easement for the well. Any displaced wells on-site, therefore, are easily replaceable and the replacement wells would only result in short-term construction impacts of digging the well, including construction dust, noise, and potential traffic and surface water quality impacts, and would require its own environmental clearance. For these reasons, development of the proposed project would not result in significant impacts to SJWC's ability to provide sufficient water supply to the downtown San José service area.

- **Development of the proposed project will not use water in a wasteful manner and is not expected to result substantial impacts related to increases in water demand. Any active on-site wells displaced by the proposed project will be replaced and the project will not result in any impacts to SJWC's ability to provide sufficient water supply to the downtown San José service area. (Less than Significant Impact)**

Storm Drainage

Future development of the completely paved site is expected to result in a reduction of stormwater runoff from the site, due to the incorporation of landscaping and pervious open space areas. Therefore, it is assumed that there is sufficient capacity in the existing storm drainage system to accommodate the future development which reduces storm runoff.

[39] Rich Pardini, Chief Engineer and Vice President, San José Water Company, personal communications, June 2002.
[40] Ibid.

- **Development of the proposed project will result in a reduction in storm water runoff when compared to the existing condition. (Beneficial Impact)**

Sanitary Sewer/Wastewater Treatment

The proposed project will result in an increase in demand for sanitary sewer services, both collection and treatment, provided by the City of San José. The sewer system in the project area has adequate capacity for the proposed project.

- **Development of the proposed project is not be expected to result in a significant impact upon the existing sanitary sewer services provided by the City of San José. (Less Than Significant Impact)**

Solid Waste

Upon completion, the proposed project would result in an increase of up to approximately 1,625 pounds of solid waste per day from the retail uses, 9,750 pounds per day from the office uses, and 1,755 pounds per day from the residential uses, in addition to an estimated 195 pounds per day of residential recyclables.[41]

According to the Source Reduction and Recycling Element prepared for the City of San José and the Countywide Integrated Waste Management Plan, there is sufficient landfill capacity for Santa Clara County needs for at least 22 more years.

Consistent with City policy, the recycling of construction and demolition debris will take place to the extent feasible, and all new buildings will be designed to include recycling services.

- **Development of the proposed project will result in an incremental increase in solid waste and recyclables collected under the City contracts. This increase would not exceed either the capacity of the collection systems or the secured landfill capacity. (Less Than Significant Impact)**

2. Mitigation and Avoidance Measures

No mitigation is required or proposed.

Conclusion: Development of the proposed project will not result in a significant impact upon utilities and services. **(Less Than Significant Impact)**

[41] The solid waste generation was based upon 2.5 pounds per 100 sf per day for general commercial, 1.0 pound per 100 sf per day for office, and 5.4 pounds per day per dwelling unit for residential. The recycling rate was based on 0.6 pound per day per dwelling unit.

L. ENERGY

This section was prepared pursuant to CEQA Guidelines Section 15126.4(a)(1)(C), and Guidelines Appendix F (Energy Conservation), which require that EIRs include a discussion of the potential energy impacts of proposed projects with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy and appropriate mitigation for reducing energy impacts.

1. Existing Setting

Electric and natural gas are supplied to residential and businesses within the City of San José by Pacific Gas and Electric (PG&E). PG&E gets its power from a mix of nuclear energy, fossil fuel, hydroelectric facilities, and power purchasing agreements. Natural gas is provided to a large number of residential, commercial, and industrial customers, with residential use being the most prevalent. According to PG&E, the largest proportional consumers in the San José area are commercial and industrial facilities.

The project site is currently developed with the San José Water Company headquarter facilities and one single family residence. Existing utility connections are in place.

With respect to project design and use of construction materials, the City of San José offers extensive information to builders on implementation of energy efficient design and construction, and on the use of recycled-content building materials which typically require less energy to manufacture and process. All development will be subject to the provisions of Title 25 of the California Administrative Code, which sets energy design standards for housing and community development.

2. Impacts

For the purposes of this EIR, an energy impact is considered significant if the project will:

- encourage activities which result in the use of large amounts of fuel, water, or energy; or
- use fuel, water or energy in a wasteful manner.

Development of the proposed project will result in the development of up to 1.04 million square feet of commercial uses, of which up to 65,000 square feet would be retail, and 325 dwelling units on the site. This development will result in the consumption of energy in three forms: 1) the fuel energy consumed by construction vehicles; 2) bound energy in construction materials such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass; and 3) ongoing operational use of energy by future occupants of the site for transportation and utilities.

Future population growth associated with development of the project will result in increases in energy demand. Since the proposed development is consistent with the General Plan land use designations for the site, the project will not result in significant additional energy demand impacts beyond those that are expected to occur from buildout of the General Plan.

Development of a mixed use development that includes housing, commercial uses, and employment centers will be more energy efficient than placing these same uses at distant locations. The proposed infill location is proximate to downtown San José's employment, service, and entertainment centers, and the site is adjacent to existing and future transit including LRT, Caltrain and Amtrak, bus service, and BART. All of these factors will serve to reduce the long-term consumption of energy by the project. Likewise, the proposed high density housing is more efficient in terms of resource consumption than detached housing.

PG&E projects maximum energy demand for the incremental growth each year in the San José/Milpitas area to provide for facilities planning. These are typically five-year projections based on historical data from the past seven years. Current projections used for PG&E facility planning assume an incremental increase of 35 megawatts per year of electricity for San José/Milpitas. PG&E regularly monitors the loading conditions and capacities of existing facilities and provides new facilities as required. Two new major facilities are planned by PG&E in the South Bay Area during the General Plan's horizon: new distribution and transmission stations in North San José/Milpitas, and a new substation and circuit in Fremont.

- **Development of the proposed project will increase energy use, but will not cause excessively wasteful or inefficient use of energy. (Less Than Significant Impact)**

Conclusion: Development of the proposed project will not result in the wasteful or unnecessary use of energy. To the extent that locating high density housing, commercial and office uses at an infill location adjacent to transit reduces demands for energy associated with commuting, the proposed development will allow for an efficient use of energy. **(Less Than Significant Impact)**

M. PUBLIC SERVICES

Unlike utility services, public services are provided to the community as a whole, usually from a central location or from a defined set of nodes. The resources base for delivery of the services, including the physical service delivery mechanisms, is financed on a community-wide basis, usually from a unified or integrated financial system. The service delivery can be provided by a city, county, service, or other special district. Usually, new development will create an incremental increase in the demand for these services; the amount of the demand will vary widely, depending on both the nature of the development (residential vs. industrial, for instance) and the type of services, as well as on the specific characteristics of the development (such as senior housing vs. family housing).

The impact of a particular project on public services and facilities is generally a fiscal impact. By increasing the demand for a type of service, a project could cause an eventual increase in the cost of providing the service (more personnel hours to patrol an area, additional fire equipment needed to service a tall building, etc.). These impacts are economic; not environmental.

CEQA does not require an analysis of fiscal impacts unless the increased demand triggers the need for a new facility (such as a school or fire station), since the new facility would have a physical impact on the environment.

1. Fire Service

Fire Protection, Rescue and Emergency Medical Services (EMS) within the San Jose corporate limits, and to the project site, are provided by the City of San Jose Fire Department. The Fire Department currently consists of 31 fire stations housing 31 Engine Companies, 8 Truck Companies, 3 Urban Search and Rescue (USAR) Companies and one Hazardous Materials Incident Team (HIT). All 31 Engine Companies and all 11 Truck/USAR Companies are staffed with a Paramedic Firefighter to provide Advanced Life Support (ALS) capabilities. Minimum daily on-duty staffing for each 24-hour shift consists of 195 personnel, including 188 on-duty firefighters; and five Battalion Chiefs, one Supervising Paramedic Captain and one Arson Investigator.

The City of San Jose participates in several Automatic Aid Programs with the Cities of Milpitas and Santa Clara and the Santa Clara County Fire Department. These Automatic Aid Programs assign the closest responding units, when available, in several designated areas in San Jose and the other participating jurisdictions, providing improved EMS and Fire Protection Services to all parties involved.

In addition, the City of San Jose participates in a Countywide Mutual Aid Program with many other fire agencies in Santa Clara County. Through this program, should any of the participating jurisdictions need additional assistance in a major emergency, and a significant portion of their own resources are committed to emergency operations, Strike Teams, composed of designated units from one or more of the Program Cities, would provide assistance to mitigate the emergency.

The San Jose Fire Department has a standard level of service for fire protection, rescue and emergency medical services. The service performance goal for the first responding unit includes a travel time not to exceed four minutes and a total reflex time of eight minutes. Total reflex time is the time period from receipt of the "911" call to the arrival of the first-due emergency vehicle at the incident. This does not include the additional time required to get to the side of a patient or to

implement other emergency mitigation measures, which could be significant, especially in responses to high rise structures or high density occupancies.

In the event of a fire at the project site, Engine 1 at Station #1 would be the first due engine.

Station #1 consists of a four-person engine company, a six-person truck company and a Battalion Chief. Engine 1 is the third busiest engine company in the City, with an average number of calls 61% higher than the city-wide average. Under ideal conditions, the travel time from Station #1 to the project site is estimated at 2.2 minutes, with a total reflex time of 6.2 minutes. These response times meet the Fire Department's standards. Adverse weather, traffic and other variables will increase these response times.

The City of San Jose's performance standard for travel time for the second due engine company and the first due truck/USAR company is six minutes, with a total reflex time of 10 minutes. The first three responding companies, along with one Battalion Chief, a total of 14 fire fighting personnel, form the Initial Firefighting Force (IFF) for most small fires and larger medical incidents in typical risk areas. In the case of a serious fire or major medical or rescue emergency, a third engine company, a second truck/USAR company and a second Battalion Chief are added to form an Effective Firefighting Force (EFF) of 24 fire fighting personnel. Standard travel time is nine minutes and total reflex time is 13 minutes for the third engine company. Standard travel time is 11 minutes and total reflex time is 15 minutes for the second due truck/USAR company and the second Battalion Chief.

In view of the fact that the residential and commercial buildings proposed for this project are high rise structures, ranging from 10 to 14 stories, a second truck/USAR company will be added to the Initial Firefighting Force, increasing staffing to 19 personnel. The standard travel time for the second truck/USAR in this circumstance will also be six minutes. If the initial alarm includes first hand reports of smoke or fire, the Effective Firefighting Force would typically be upgraded to include a total of five engine companies, three truck companies, two USAR companies, the HIT Unit, the Air Unit, the Supervising Paramedic Captain, four Battalion Chiefs, and one Division Chief or Deputy Chief, for a total minimum staffing level of 56 fire fighting personnel.

The proposed PD Zoning land use plan has been designed to provide sufficient fire and emergency vehicle access to all areas of the project site. Fire truck access will be provided through the plaza area behind the San Jose Water Company building. Fire hydrants will be located along Delmas Avenue and along the project's frontage with the future LRT station. The PD zoning land use plan has been reviewed and approved, in concept, by the San Jose Fire Department. The final design of the proposed buildings will be subject to Fire Department review and approval.

The table below includes all units of the Initial First Alarm assignment for buildings four or more stories in height, with their corresponding Travel Times (TT) and Total Reflex Times (TRT) to the project area.

Response Order	**Unit**	**Address**	**Distance**	**TT EST**	**STD**	**TRT EST**	**STD**
1st Eng	E1	225 N. Market St.	0.7 mi	2.2	4.0	6.2	8.0
2nd Eng	E30	454 Auzerais Ave.	1.0 mi	3.0	6.0	7.0	10.0
1st T/U	T1	225 N. Market St.	0.7 mi	2.5	6.0	6.5	10.0
2nd T/U	T3	98 Martha St.	2.0	5.0	6.0	7.0	10.0
1st BC	BC1	225 N. Market St.	0.7 mi	2.0	6.0	6.0	10.0

The anticipated development on the project site may create some delays in response times and increased demand for fire protection services. At the expected build-out of approximately one million square feet of commercial and retail development, and up to 325 dwelling units, this could create an additional call volume estimated at about 70 to 75 or more calls per year, added to the already extremely busy Engine 1's heavy workload. By itself, this project would not require additional fire facilities.

2. Police Service

Police protection services are provided to the project site by the City of San José Police Department (SJPD). Officers patrolling the project area are dispatched from police headquarters, located at 201 West Mission Street. The SJPD presently consists of approximately 1,411 sworn officers and 402 civilian personnel.

The project site is located in District S, Beat 3. Beat S-3 serves an area that covers 1.15 square miles and has 4,120 residents (0.5 percent of the City's population).

All new development in San José is reviewed by the Police Department for design measures that would minimize criminal activity and improve the security and defensibility of residences. Despite this review, the addition of new development on the site will likely result in an incremental increase in calls for police service. These additional calls, however, are not anticipated to result in the construction of new facilities to provide police service.

3. Schools

The City of San José is served by a total of 19 public school districts, serving elementary, middle, and high school students. Thirteen of these districts are elementary school districts, three are high school districts and three are unified school districts. The project site is located within the San José Unified School District.

All of the schools serving the project site are currently operating under capacity. The closest elementary school to the site is Hester Elementary School, located at 1460 The Alameda, about 0.8 miles northwest of the project site. The current (June 2002) enrollment at Hester Elementary School is 406 students and the capacity is 530 students. The projected enrollment for Fall 2002 at Hester Elementary is 392 students. The closest middle school is Hoover Middle School, located at 1635 Park Avenue, about 1.4 miles northwest of the site. The current (June 2002) enrollment at Hoover Middle School is 1,016 students and the capacity is 1,176. The projected Fall 2002 enrollment at Hoover is 1,032 students. The closest high school to the site is Lincoln High School, located at 555 Dana Avenue, located about 1.4 miles northwest of the site. The current (June 2002) enrollment at Lincoln is 1,523 and the capacity is 1,720. The projected Fall 2002 enrollment at Lincoln High School is 1,650.[42] All three of the schools serving the project site are projected to operate below capacity in Fall 2002.

The San José Unified School District uses a student generation rate of 0.20 students per multi-family attached dwelling unit for each of the three school levels. Using this generation rate, the proposed 325 dwelling units would generate 65 elementary students, 65 middle school students, and 65 high

[42] Robert Gonzales, San José Unified School District, written communications, June 2002.

school students. Based upon the schools' projected enrollment, there is sufficient capacity at the schools to accommodate the students that might live at the project site. No new schools would be needed to serve the proposed development.

State law (Government Code Section 65996) specifies an acceptable method of offsetting a project's effect on the adequacy of school facilities as the payment of a school impact fee prior to issuance of building permit. In San José, future development project applicants can either negotiate directly with the affected school district(s), or they can make a "presumptive payment" of $1.93 per square foot for multi-family units. The school district is responsible for implementing the specific methods for mitigating school effects under the Government Code. The school impact fees and the school districts' methods of implementing measures specified by Government Code 65996 would partially offset project-related increases in student enrollment.

4. Libraries

The San José Public Library System consists of one main library and 17 branch libraries. The Dr. Martin Luther King Junior Main Library is located adjacent to the Convention Center downtown, and the 17 library branches are located throughout the City. The San José Public Library Branch Facilities Master Plan (approved September 2000) identifies long-term expansion of library branches. A new city library, which is a joint project between the City and San José State University, is currently under construction at the corner of San Fernando and 4th Streets, in downtown San José. The libraries nearest the site include: the Joyce Ellington Branch (491East Empire Street) that is proposed for expansion to 17,000 sf; Biblioteca Latinoamericana (921 S. First Street); Rosegarden Branch (1580 Naglee Avenue) that is proposed for expansion to 17,000 sf; and the Willow Glen Branch (1157 Minnesota Avenue) that is proposed for expansion to 13,000 sf.

The San José General Plan benchmarks for library services are 10,000 square feet of library space per 36,000 population, and 18.3 weekly service hours per 10,000 population. The increase in on-site population resulting from the project is expected to be served by the existing libraries in the area and will not result in the need for new or expanded library facilities.

5. Parks

The City of San José provides park lands, open space, and community facilities for public recreation and community services. Some of these facilities are provided in conjunction with, or are supplemented by, other public uses such as County parks and lands used for flood control purposes. Parks and recreation facilities vary in size, use, type of service, and provide for city, regional, and neighborhood uses. The City Department of Parks, Recreation and Neighborhood Services is responsible for the construction, operation and maintenance of all City parks and recreational facilities.

The City of San José has established level of service benchmarks for park land and community centers. These levels of service area as follows: 3.5 acres of neighborhood and community serving recreational lands per 1,000 population, of which a minimum of 1.5 acres must be City owned neighborhood or community park lands, up to 2 acres can be provided by school playgrounds, and all should be located within reasonable walking distance; 7.5 acres of regional/City-wide park lands per 1,000 population; and 500 square feet of community center space per 1,000 population.

The Guadalupe River Park and Flood Protection Project is currently under construction along the eastern edge of the project site. This large flood control project extends between Interstates 880 and 280 and includes a nearly continuous trail system along the banks of the river. No trails are currently proposed by the Guadalupe River Project along the SJW project frontage (western bank) of the river between San Fernando and West Santa Clara Streets, but trails are included along the eastern bank of the Guadalupe River. In the project reach, there will be two trails on the eastern bank downstream of Park Avenue, including 18-foot wide river and top-of-bank trails. The river trail will be built into the armored part of the river bank, six feet above the summer water level and will connect to the existing Woz Way to Park Avenue trail that passes under, and terminates at the downstream side of Park Avenue. There will be a ramp sloped down the bank from the upper trail to the lower trail between Park Avenue and San Fernando Street. There will be a ramp sloped up the bank that would merge the river trail back to the top-of-bank trail downstream of West Santa Clara Street. The top-of-bank trail will have stairs to the river trail upstream and downstream of West Santa Clara Street.

The SJW Land Company project's proposed trail along the eastern bank of Los Gatos Creek between San Fernando and Santa Clara Streets would facilitate implementation of the City's Los Gatos Creek Trail Project and also would provide a pedestrian link between the planned San Fernando Street light rail station and the HP Pavilion (Arena). The proposed project also may include a trail and landscaping along its frontage to the Guadalupe River within the riparian corridor, as permitted by the Riparian Corridor Policy Study.

The City of San José has adopted a Parkland Dedication Ordinance (PDO) and Park Impact Ordinance (PIO) that requires residential developers to either dedicate parkland, pay in-lieu fees, or both, to offset the demand for neighborhood parkland created by their housing developments. Residential development as proposed by this project would result in an increased demand for neighborhood parks and recreational facilities. Implementation of the City's PDO/PIO would offset any increased demand for neighborhood/community park facilities resulting from the proposed project. Additionally, all new development of high density housing is typically required to provide private and common open space in conformance with the City's adopted Residential Design Guidelines, subject to site constraints, such as noise impacts, etc.

III. CUMULATIVE IMPACTS

A cumulative impact, as defined by CEQA, consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. Cumulative impacts may result from individually minor, but collectively significant projects taking place over a period of time. The CEQA Guidelines (Section 15130) state that an EIR should discuss cumulative impacts "when the projects incremental effect is cumulatively considerable, as defined in section 15065(c)." A cumulative impact consists of an impact which is created as a result of the combination of the project together with other projects causing related impacts. The discussion does not need to be in as great a detail as is necessary for project impacts, but is to be "guided by the standards of practicality and reasonableness". The purpose of the cumulative analysis is to allow decision makers to better understand the potential impacts which might result from approval of past, present, and reasonably foreseeable future projects, in conjunction with the proposed project.

Based on the analysis in this EIR, the cumulative impacts identified as being potentially significant include traffic and air quality.

1. Cumulative Impacts

Cumulative Traffic Impacts

For the purposes of this analysis, two potential developments were identified as pending developments that would add traffic to the study area under cumulative conditions and their impacts on the study intersections and freeway segments were evaluated. The pending projects, the Downtown Mixed Use project and FMC, are described below in Table 21.

TABLE 21
CUMULATIVE (PENDING) PROJECTS

Project Name	Land Use	Size
FMC	Office/Research & Development	3,000,000 sf
Mixed Use Project*	Retail	318,750 sf
	Residential	1,156 units
	Office	1,232,660 sf
	Hotel	400 rooms

Notes: * Pending development includes the portion of the Mixed Use project that is not already included in the CIM project (described in the Background Conditions). The remainder of the Mixed Use project covers three developable sites: First/San Fernando Street, Mitchell Block, and Century Center Redevelopment Plan Amendment Area.
Source: City of San Jose Department of Public Works, Development Services Division

Traffic volumes under cumulative conditions were estimated by applying to the existing volumes an annual growth rate of 1.2 percent (through the anticipated completion date of 2010), then adding the trips from approved but not constructed developments (background conditions), estimated project trips, and estimated trips resulting from the two proposed future projects [FMC and Downtown Mixed Use (comprised of the Century Center, First Street/San Fernando Street, and Mitchell Block projects)].The estimated trips generated by the recently approved CIM project (originally part of the

Mixed Use project) are already included in the background traffic volumes. The traffic volumes for cumulative conditions are shown graphically in Appendix E of this EIR.

The 1.2 percent annual growth factor is included to account for other development for which applications have not been filed, but which may occur before 2010. One potential source of this development is a draft planning document called "Strategy 2000" that covers a large area of downtown San José. "Strategy 2000" was created for the Redevelopment Agency of San Jose to serve as a guide for development activities in the Greater Downtown planned for 2000-2010. The area covered by this document extends west to Diridon Station, north to approximately Taylor Street, east to include San Jose State University, and south to approximately I-280. The project site is included in this plan as a development site. The draft plan, "Strategy 2000: San Jose Greater Downtown Strategy for Development" is currently circulating to the public and an Environmental Impact Report is being prepared. The projected development described in the plan includes 8 to 10 million square feet (sf) of new office space, 8,000 to 10,000 new dwelling units, 900,000 to 1.2 million sf of retail and entertainment uses, and 2,000 to 2,500 new hotel guest rooms. The plan has not been formally approved, but it is foreseeable that some of the development may occur prior to 2010. The 1.2 percent annual growth rate is intended to account for this potential growth, as well as other growth that may occur in the area.[43]

It should be noted that a cumulative impact analysis can only look at what is "reasonably foreseeable". Projects which are proposed now may actually be built in phases, or may not be built for many years. The actual date at which all of this development would be completed is unknown, but is assumed for the purposes of this analysis to occur within the next eight years (by the year 2010).

Cumulative conditions include implementation of project-sponsored transportation improvements but not the recommended project mitigation measures. Thus, the intersection lane configurations under cumulative conditions were assumed to be the same as described under project conditions.

Cumulative Intersection Levels of Service

Intersection levels of service were calculated to evaluate the operating levels of the key intersections under cumulative conditions. The resulting level of service are summarized in Table 22. The level of service calculations are shown in Appendix E.

[43] The CMA Guidelines provide for use of either a 1.2 percent growth rate per year or a list of approved projects as a means of evaluating future cumulative traffic. By using both, this analysis is conservative, in that it shows more growth than the CMA Guidelines require.

TABLE 22

CUMULATIVE INTERSECTION LEVELS OF SERVICE

Intersection	Peak Hour	Cumulative Conditions Ave. Delay	Cumulative Conditions LOS	Mitigated Cumulative Ave. Delay	Mitigated Cumulative LOS
SR 87 and Julian Street (E) /5/	AM	42.1	E	36.7	D
	PM	38.4	D	38.1	D
SR 87 and Julian Street (W)	AM	13.0	B		
	PM	12.7	B		
SR 87 and Santa Clara Street	AM	35.7	D		
	PM	13.5	B		
I-280 and Bird Avenue (N) /6/	AM	22.8	C	20.0	C
	PM	49.8	E	23.0	C
I-280 and Bird Avenue (S)	AM	27.5	D		
	PM	33.9	D		
The Alameda and Hedding Street	AM	36.7	D		
	PM	27.9	D		
The Alameda and Naglee Avenue	AM	27.5	D		
	PM	26.3	D		
The Alameda and Race Street	AM	26.9	D		
	PM	21.6	C		
Almaden Boulevard and San Carlos Street /7/	AM	24.9	C	20.6	C
	PM	42.3	E	28.7	D
Autumn Street and Santa Clara Street	AM	24.0	C		
	PM	14.1	B		
Bird Avenue and San Carlos Street /3/	AM	26.5	D	25.6	D
	PM	64.2	F	48.0	E
Market Street and San Carlos Street /7/	AM	28.0	D	26.3	D
	PM	42.3	E	38.8	D
Montgomery Street and Santa Clara Street	AM	11.8	B		
	PM	15.6	C		
Almaden Blvd and Park Av	AM	25.3	D		
	PM	30.1	D		
Almaden Blvd and San Fernando St	AM	14.5	B		
	PM	16.6	C		
Autumn St and Julian St	AM	8.0	B		
	PM	10.9	B		
Autumn St and San Fernando St	AM	5.4	B		
	PM	8.6	B		

* Denotes CMP intersection.

[1] Intersection is currently unsignalized. The planned Vasona LRT Project will add signal control and a westbound right-turn lane. Project-sponsored improvements include addition of left-turn lanes on the east and west approaches and a second southbound through lane. The above results reflect service-only use of the proposed project driveway on San Fernando Street.

[2] Intersection would be signalized as a part of the proposed project.

[3] Project mitigation measure (add a 2nd NB left-turn lane) would partially mitigate significant cumulative impact on intersection LOS Improvements that would fully mitigate the cumulative impact are not feasible.

[4] Mitigation measure (add a 2nd SB through lane) would mitigate significant cumulative impact on intersection LOS.

[5] Mitigation measure (take out shared through-left southbound lane and add a 2nd southbound through lane and a 2nd southbound left-turn lane) would mitigate significant cumulative impact on intersection LOS.

[6] Mitigation measure (take out all-movement westbound lane and add a 2nd westbound left-turn lane and a westbound shared through-right lane) would mitigate significant cumulative impact on intersection LOS.

[7] Mitigation measure (prohibit left turns on San Carlos) would mitigate significant cumulative impact on intersection LOS.

TABLE 22+A99 (cont.)

CUMULATIVE INTERSECTION LEVELS OF SERVICE

Intersection	Peak Hour	Cumulative Conditions Ave. Delay	Cumulative Conditions LOS	Mitigated Cumulative Ave. Delay	Mitigated Cumulative LOS
Auzerais Av and Bird Av	AM	14.8	B		
	PM	20.4	C		
Auzerais Av and Delmas Av	AM	12.4	B		
	PM	11.4	B		
Bascom Av and San Carlos St	AM	32.8	D		
	PM	32.9	D		
Bird Av and Virginia St	AM	17.8	C		
	PM	11.2	B		
Delmas Av/SB SR 87 and Park Av /4/	AM	20.3	C	18.9	C
	PM	199.1	F	34.4	D
Delmas Av and San Carlos St	AM	13.7	B		
	PM	21.6	C		
First St and Reed St	AM	30.9	D		
	PM	22.2	C		
Lincoln Av and San Carlos St	AM	23.7	C		
	PM	27.9	D		
Meridian Av and San Carlos St	AM	25.9	D		
	PM	31.5	D		
Montgomery St and Park Av	AM	14.3	B		
	PM	22.3	C		
Montgomery St and San Fernando St	AM	9.7	B		
	PM	12.9	B		
Park Av and Woz Way/ NB SR 87	AM	13.1	B		
	PM	16.0	C		
Woz Way and San Carlos St	AM	15.3	C		
	PM	16.8	C		
Delmas Av and Santa Clara St /2/	AM	10.2	B		
	PM	11.7	B		
Delmas Av and San Fernando St /1/	AM	18.0	C		
	PM	20.6	C		
Delmas Avenue and Project Driveway	AM	19.9	C		
	PM	18.0	C		

* Denotes CMP intersection.

[1] Intersection is currently unsignalized. The planned Vasona LRT Project will add signal control and a westbound right-turn lane. Project-sponsored improvements include addition of left-turn lanes on the east and west approaches and a second southbound through lane. The above results reflect service-only use of the proposed project driveway on San Fernando Street.

[2] Intersection would be signalized as a part of the proposed project.

[3] Project mitigation measure (add a 2nd NB left-turn lane) would partially mitigate significant cumulative impact on intersection LOS Improvements that would fully mitigate the cumulative impact are not feasible.

[4] Mitigation measure (add a 2nd SB through lane) would mitigate significant cumulative impact on intersection LOS.

[5] Mitigation measure (take out shared through-left southbound lane and add a 2nd southbound through lane and a 2nd southbound left-turn lane) would mitigate significant cumulative impact on intersection LOS.

[6] Mitigation measure (take out all-movement westbound lane and add a 2nd westbound left-turn lane and a westbound shared through-right lane) would mitigate significant cumulative impact on intersection LOS.

[7] Mitigation measure (prohibit left turns on San Carlos) would mitigate significant cumulative impact on intersection LOS.

City of San Jose Analysis

Measured against the City of San Jose level of service standards, absent mitigation, the following six intersections would operate at an unacceptable level (LOS E or worse) under cumulative conditions.

- SR 87 and Julian Street (E) (AM Peak Hour)
- I-280 and Bird Avenue (N) (PM Peak Hour)
- Almaden Boulevard and San Carlos Street (PM Peak Hour)
- Bird Avenue and San Carlos Street (PM Peak Hour)
- Market Street and San Carlos Street (PM Peak Hour)
- Delmas Avenue/SB SR 87 Off-Ramp and Park Avenue (PM Peak Hour)

All other study intersections would operate at an acceptable LOS D or better during the AM and PM peak hours under cumulative conditions.

It should be noted that the proposed project mitigation measure at the intersection of Delmas Avenue/Southbound SR 87 Off-Ramp and Park Avenue will also mitigate the cumulative impact at this intersection to a less than significant level.

CMP Intersection Analysis

Measured against the CMP standards, absent mitigation, the following intersection would operate at an unacceptable level (LOS F) under cumulative conditions:

- Bird Avenue and San Carlos Street (PM Peak Hour)

The proposed project mitigation measure, adding a second northbound left-turn lane on Bird Avenue, improves the operation of the intersection under cumulative conditions from LOS F to LOS E during the PM peak hour. As previously discussed, the proposed project mitigation measure also improves the intersection level of service under project conditions from LOS E to LOS D in the PM peak hour. Therefore, the fact that this intersection operates at an unacceptable LOS level (LOS E, after project mitigation) under cumulative conditions is due solely from traffic from other future projects. In other words, the project would mitigate its share of the cumulative traffic impact. Accordingly, the project's contribution, after mitigation, to this cumulative impact would be less than cumulatively considerable. CEQA Guidelines 15130(a)(3), 15064(i)(5).

All other CMP study intersections would operate at an acceptable LOS E or better during the AM and PM peak hours under cumulative conditions.

Since the project will result in a significant impact to regional transportation facilities (freeway segments), it will also contribute to a significant cumulative impact to regional transportation facilities.

It should be acknowledged that the cumulative traffic impacts discussion above does not take into account several major transit improvement projects that will be adjacent to the site. The Vasona LRT will connect Los Gatos, Campbell, and western San José with the LRT system and a LRT station will be located adjacent to the site. Major improvements to Caltrain service are planned, including electrification of trains, and the provision of “baby” bullet trains between San José and San

Francisco. Additionally, the BART system will be extended to downtown San José, with a station at the nearby Diridon Station. Given the proximity of the cumulative projects to these transit improvements, it is likely that there will be some increase in transit ridership, with a corresponding reduction in vehicle trips. No traffic has been removed from the roadway system in the projection of future cumulative traffic. Therefore, the cumulative traffic evaluation should be considered a very conservative estimate of future traffic conditions and may be overstating impacts, given these planned transit improvements.

Cumulative Air Quality Impacts

As described in the project air quality impact analysis presented in Appendix F, the BAAQMD guidance for CEQA documents provides that, if a project is found to have an individually significant air quality impact, it would also be considered to have a significant cumulative impact. The project will contribute considerably to regional emissions that exceed the significance thresholds for reactive organic gases, nitrogen oxides, and PM-10. The first two pollutants are ozone precursors, and the Bay Area is a non-attainment area for both the state and federal ozone standards. The Bay Area also is a non-attainment areas for the state PM-10 standard. The project, along with other developments, would exacerbate these existing exceedances. Therefore, emissions from the project and from other anticipated development in the downtown area would result in significant regional impacts in the San Francisco Bay region.

Cumulative Long-Term Noise Impacts

The cumulative impact of pending development will result in significant increases in traffic and traffic-related noise on public streets in the area of the proposed project. The operational noises of the commercial and residential uses represented by the foreseeable development will include outdoor mechanical equipment, human activities, and similar sources of noise. The future noise levels described in Section II, G, of this EIR include the cumulative traffic described above. The cumulative noise generated by the project and other pending projects is expected to result in a significant cumulative noise impact.

Cumulative Construction Noise Impacts

Given that there are several large development projects approved and pending in the downtown area (CIM, the proposed project, and the Downtown Mixed Use Project), it is likely that more than one large development project may be under construction at the same time over the next few years. Even with mitigation measures that are included in each project to reduce construction noise, the cumulative construction noise of these projects will be an ongoing annoyance to residents and other sensitive noise receptors in the downtown area.

Other Cumulative Impacts

Based upon an evaluation of available information regarding the location and scale of the pending development, it is concluded that cumulative impacts in the subject areas of land use, job/housing balance, soils and geology, hydrology, cultural resources, hazardous materials, services and utilities, and visual resources will not be significant.

Cumulative effects of development throughout the downtown and core areas of the City of San Jose may require additional fire service facilities at some future time.

Much of the development evaluated as "reasonably foreseeable" will take place over an extended period of time. The construction impacts of the cumulative projects will, therefore, also be occurring over this time period. While construction of these projects would cause localized impacts as a result of traffic, and visual effects, the only significant cumulative impact from construction is anticipated to be air quality impacts associated with dust generation. Measures required for construction projects including watering, covering dust piles, and limitations on grading during windy conditions would reduce the impacts to a less than significant level, as described in Section II, F**,** ***Air Quality***. Cumulative impacts from construction (with the exception of construction noise, described above) are not considered to be significant.

2. Mitigation for Cumulative Impacts

Significant cumulative impacts identified in the previous discussion include traffic and regional air quality impacts. Potential mitigation for cumulative impacts is discussed below.

Mitigation for Cumulative Traffic and Traffic Noise Impacts

The CEQA Guidelines discuss the fact that mitigation for cumulative impacts may be different than for individual project-specific impacts. The Guidelines state that:

"...the only feasible mitigation for cumulative impacts may involve the adoption of ordinances or regulations rather than the imposition of conditions on a project-by-project basis." [Section 15030]

This responds to the problem that arises when the scope or scale of cumulative impacts is beyond the ability of a single development or even a single jurisdiction to mitigate. Traffic congestion in Santa Clara County is a regional problem. Much of the congestion identified in the project's traffic analysis is on regional transportation facilities, including freeways, and much of the existing congestion in the area is a result of through movements. The Santa Clara County Congestion Management Plan identifies the preparation of deficiency plans as an appropriate response to significant impacts on regional facilities. The Congestion Management Agency is preparing a Countywide Deficiency Plan to address long-term regional traffic congestion and the improvements to the regional transportation systems that may help reduce it. The Countywide Deficiency Plan has not yet been completed, and the mechanisms for funding its implementation have not been adopted, but participation in such a Plan may be the only effective mitigation for substantially reducing or mitigation cumulatively significant regional traffic impacts. Because no Plan exists, it is unclear whether regional traffic impacts could be reduced to a less than significant level.

This implies that a programmatic approach to cumulative mitigation may be necessary. Contributions towards a special fund for improvements to the CMP roadway network would be a programmatic mitigation. The level of participation by the new development could be assessed, based on a reasonable relationship to the individual development's contribution to the cumulative traffic impact.

Mitigation for impacts to local intersections would require project-specific analysis and design solutions, based on the timing of individual proposals and the status of planned improvements. The implementation of improvements to the regional roadway system will reduce impacts to the local streets, as through traffic is redirected to the regional system. The following mitigation measures are identified for the cumulative traffic impacts.

SR 87 and Julian Street (E) (CSJ LOS)

Widen the northbound SR 87 off-ramp from three to four lanes. With the improvement, the off-ramp would have two left-turn lanes and two right-turn lanes. Eliminating the shared left/right-turn lane on the off-ramp would allow a modification in the signal phasing. Currently, all movements on the off-ramp are served in a single phase while traffic on all other approaches is stopped. The new lane configuration would enable the use of an overlap phase wherein the right-turn movement on the off-ramp is served during two phases: with the off-ramp left-turn movement and with the westbound through movement. With this mitigation measure, the intersection would operate at an acceptable level (LOS D or better) under cumulative conditions.

I-280 and Bird Avenue (N) (CSJ LOS)

Improving the level of service at this intersection to the City of San Jose's minimum standard (LOS D) would require widening the northbound I-280 off-ramp from three to four lanes. Construction of this improvement may require the removal of one or more trees adjacent to the ramp but would not require a retaining wall or modification to the existing ramp structure located approximately 700 feet east of Bird Avenue.

Almaden Boulevard and San Carlos Street. (CSJ LOS)

The intersection level of service could be improved by either adding a southbound right-turn lane or a second northbound left-turn lane. Adding a right-turn lane would require widening the street, which would increase the crossing distance and hazards for pedestrians. Adding a second northbound left-turn lane would involve the elimination of median landscaping including palm trees. Thus, improving traffic operations by adding lanes is not desirable at this intersection. Alternatively, intersection operations could be improved to an acceptable level of service by prohibiting left-turn movements on San Carlos Street. Prohibiting left turns would change traffic patterns in the area and could have potential impacts at other locations.

Market Street and San Carlos Street (CSJ LOS)

Adding lanes at this intersection is not feasible due to the constraints posed by the adjacent developments. Alternatively, intersection operations could be improved to an acceptable level of service by prohibiting left-turn movements on San Carlos Street. Prohibiting left turns would change traffic patterns in the area and could have potential impacts at other locations.

Delmas Avenue/Southbound SR 87 Off-Ramp and Park Avenue (CSJ LOS)

The same improvement recommended to mitigate the significant impact under project conditions, adding a second southbound through lane, also would mitigate the significant impact under cumulative conditions. With the recommended mitigation measure, the intersection would operate at an acceptable level (LOS D or better).

Conclusion: The proposed project mitigation at the intersection of Delmas Avenue/Southbound SR 87 Off-Ramp and Park Avenue will also mitigate the cumulative impact at this intersection. The City could adopt a program by which each project that contributes considerably to a significant cumulative impact is required to fund its fair share of the above mitigation measures, in accordance with CEQA Guidelines Section 15130(a)(3). If the City adopted such a program and collected fair share contributions, then the Project's contribution to the cumulative impact would be rendered less

than cumulatively considerable and, therefore, less than significant. Since there is no mechanism in place to achieve mitigation of identified cumulative traffic impacts at the other five intersections, this would be a significant unavoidable cumulative impact. Since the cumulative noise impact is directly related to the increase in overall traffic volumes, there is no way to reduce the noise impact, without reducing overall traffic volumes from the cumulative development. Since there is no mechanism in place to reduce overall traffic volumes, the cumulative noise impact is also significant and unavoidable. **(Significant Unavoidable Cumulative Impact)**

Mitigation for Cumulative Air Quality Impacts

Air quality impacts are primarily a result of traffic impacts in the project area. While the project's contribution to current regional air pollution is considered to be significant, the BAAQMD assumes that air quality standards will be achieved in the region by the year 2010. The BAAQMD's guidelines would, therefore, consider project contributions to be cumulatively significant in the near term, but not significant in the long term.

Mitigation for significant air quality impacts includes techniques for reducing automobile traffic. Site design and operational programs that encourage carpooling, use of transit, and other transportation other than single occupant vehicles are encouraged by the CMP, BAAQMD, and other regional planning agencies. As noted above in the discussion of cumulative traffic, given the proximity of the cumulative projects to planned major transit improvements to LRT, BART, and Caltrain, it is likely that there will be some increase in transit ridership, with a corresponding reduction in vehicle trips. These techniques will reduce air quality impacts, but the Regional Clean Air Plan anticipates that only regional and regulatory programs to achieve cleaner burning vehicles and fuels and reducing automobile usage on a regional scale will result in long term achievement of air quality standards. The proposed project is consistent with the general policy direction of the Clean Air Plan, in that it proposes high density residential and commercial uses at an infill location adjacent to transit. To the extent that development of the project reduces the need for longer commutes both in and out of the County, it will ultimately contribute to an improvement in regional air quality. Near term cumulative air quality impacts, however, will remain a significant unavoidable impact.

Conclusion: Approval of all of the proposed developments would contribute to near term air quality standard exceedances. This would be a significant unavoidable cumulative impact. **(Significant Unavoidable Cumulative Impact)**

Mitigation for Cumulative Construction Noise Impacts

Each of the projects that comprise the cumulative development scenario will be required to implement mitigation measures to reduce their construction noise (similar to the measures described for the proposed project in Section III, G., of this EIR). While these measures may be sufficient to reduce the construction noise impact of an individual project, the cumulative construction noise of these projects may be an ongoing annoyance to residents and other sensitive noise receptors in the downtown area for several years, particularly if multiple projects are under construction at the same time. For this reason, the cumulative construction noise impact is considered significant and unavoidable.

Conclusion: Approval of all of the proposed developments would contribute to a significant unavoidable cumulative construction noise impact. **(Significant Unavoidable Cumulative Impact)**

IV. ALTERNATIVES TO THE PROPOSED PROJECT

CEQA requires that an EIR identify alternatives to a project as proposed. The CEQA Guidelines specify that the EIR describe a range of reasonable alternatives to the project which "would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project". The purpose of this section is to determine whether there are alternatives of design, scope or location which would substantially lessen the significant impacts, even if those alternatives "impede to some degree the attainment of the project objectives" or are more expensive (Section 15126.6).

The significant unavoidable impacts identified to result from the proposed project are: traffic impacts, regional air pollution impacts, shading impacts and noise impacts. Alternatives required by CEQA to be considered should, therefore, be capable of avoiding or lessening some or all of these impacts.

Some project alternatives were considered, but were rejected as infeasible, because they would not reduce the impacts of the proposed development. This includes an all office alternative, because it would generate more traffic than the project, with a proportionate increase in air pollutant emissions. It would also have similar construction noise impacts to the project. An all residential alternative, (including residential on the east side of Delmas Avenue) was considered, but was rejected as infeasible, due to the high noise levels on this portion of the project site. According to the Housing Opportunities Study, General Plan Amendments Phase I, EIR, the upper stories on the east side of Delmas Avenue would be in direct line-of-sight to the elevated freeway section and noise levels are estimated to be about 80 dBA CNEL at a distance of 50 feet from the edge of the freeway section.[44] Noise at this location exceeds General Plan guidelines for residential land uses and, for this reason, the City determined that the east side of Delmas Avenue was not appropriate for residential uses.

Alternative land uses that were considered for the site included leaving the existing San José Water Company office building in place and constructing a parking structure on the remainder of the site to provide off-street parking for the Pavilion and greater downtown area. A parking structure does not, by itself, generate traffic. Construction of a parking structure would, therefore, avoid the project's traffic and air quality impacts, as well as reduce the duration of construction. Provision of off-street parking may not be economically feasible for the applicant, because there is insufficient daily and daytime market demand to make construction and maintenance of a parking structure economically viable. Additionally, a parking structure would not meet the objectives of the project to develop an infill location adjacent to transit with high density commercial and residential uses.

Consideration of a "No Project" alternative is mandatory. In addition, logical alternatives which might reduce the significant impacts identified for the proposed project would include reduced scale alternatives (a smaller scale of development) and a different location. A different location need only be considered if it is capable of reducing some or all of the significant impacts identified. Each of these alternatives is discussed below.

A. NO PROJECT ALTERNATIVE

Under a No Project alternative, the project site would be remain as the San Jose Water Company headquarters, surface parking lots, and one residence. This alternative would completely avoid all of

[44] City of San José, *Housing Opportunities Study General Plan Amendments, Phase I, Final EIR*, March 2001.

the identified impacts anticipated to occur as a result of the project. The increased traffic would not be generated at the site. This impact would avoid the project's impact at Bird Avenue and San Carlos Street, and the project's significant unavoidable impact on freeway segments. Elimination of project traffic would also avoid traffic-related increases in local and regional air pollutants. This alternative would also avoid the construction noise impacts. The No Project Alternative would also avoid the project's significant shading impacts on the Arena Green and Guadalupe River Park trail at midday around the winter solstice.

The No Project Alternative does not meet any of the project objectives. The No Project alternative would not provide the economic benefits to the City resulting from development of the site and the generation of 3,000 jobs in a jobs-poor City. The No Project alternative does not encourage transit use by developing an infill site that is adjacent to a future LRT station and is within walking distance of a Caltrain and Amtrak depot, and future BART. The No Project Alternative would not encourage pedestrian traffic along the Guadalupe and Los Gatos Creeks by providing landscaped pathways along these creek corridors. The No Project alternative would not provide a landscaped pedestrian pathway between the future LRT station and the Pavilion that is proposed along the east side of Los Gatos Creek.

Conclusion

The No Project Alternative is environmentally superior to the proposed project, because it avoids the impacts of the project. The No Project Alternative would not meet any of the project objectives. The No Project Alternative would also not have the positive benefits anticipated to result from the project. The No Project alternative would not provide the economic benefits to the City resulting from development of the site and the generation of 3,000 jobs in a jobs-poor City. The No Project alternative does not encourage transit use by developing an infill site which is adjacent to a future LRT station and is within walking distance of a Caltrain and Amtrak depot, and future BART. The No Project Alternative would not encourage pedestrian traffic along the Guadalupe and Los Gatos Creeks by providing landscaped pathways along these creek corridors.

B. REDUCED DENSITY ALTERNATIVE

A design alternative to the project as presently proposed would be a smaller scale commercial and residential development, representing a less intense use of the site. Traffic generated by the proposed project is expected to result in significant impacts to five freeway segments. Evaluation of the most critical freeway segment[45], Southbound SR 87 between Alma and I-280 (PM Peak), was conducted to determine the percent reduction necessary to avoid having impacts on this segment. The results show that the proposed project size would have to be reduced by 74%, in order to avoid all of the project's traffic impacts. This results in a reduced project of 249,500 square feet (sf) of office use, 17,000 sf of retail use, and 85 dwelling units. While the project proposes building heights of ten to 14 stories, the smaller scale project could be constructed in two four-story commercial buildings over a 3-level (above grade) parking structure, and one 4.5-story residential building over a 2.5-level parking structure for total maximum building heights of between 92 and 100 feet. The Reduced Density Alternative would not include below-grade parking. Under the Reduced Density Alternative, Delmas Avenue would retain it existing straight alignment. The Reduced Density

[45] This is called the "most critical" freeway segment, because the least project traffic results in a significant impact on this segment. If project impacts are reduced to a less than significant impact on this segment, then they would also be less than significant on the other freeway segments and intersections.

Alternative would include the same setbacks from the San José Water building as proposed by the project. The Reduced Density Alternative could be developed with shorter building heights that could avoid the project's significant shading impact on the Arena Green and Guadalupe River Park trail during midday around the winter solstice.

Project impacts (primarily traffic and air quality) are linked fairly directly to the building square footage, as the project benefits. There are an infinite number of reduced density alternatives, therefore, that could be analyzed above the 266,500 sf commercial and 85-unit alternative described here, that would reflect a proportional decrease in both adverse and beneficial effects. For this reason, additional reduced density alternatives have not been separately analyzed.

The Reduced Density Alternative would avoid the significant unavoidable traffic and air quality impacts of the project. This impact would avoid the project's impact at Bird Avenue and San Carlos Street, and the project's significant unavoidable impact on freeway segments. The smaller-scale alternative possibly could be built without pile driving, which would reduce the construction noise impacts to a less than significant level. The Reduced Density Alternative would result in building heights that are more compatible with existing development on the west side of Highway 87.

Conclusion

The Reduced Density Alternative involves the same site and would require the same development approvals as the proposed project.

The Reduced Density Alternative is the environmentally superior alternative. The Reduced Density Alternative would avoid the significant unavoidable impacts of the project, while providing some of the benefits of the project. This alternative would not take advantage of the site's proximity to transit by providing a high density commercial and residential development on a site that is adjacent to existing and future transit, including the Diridon transit hub. The Reduced Density Alternative would provide for approximately 800 jobs on the site, which is about one-quarter the jobs accommodated by the proposed project. The beneficial economic effects of improving the City's jobs/housing imbalance would be reduced proportionately with the reduction in development size. The Reduced Density Alternative, therefore, would not meet many of the City's General Plan goals regarding encouraging economic development and high density uses proximate to transit stations.

C. ALTERNATIVE SITE

An alternative site, known as the Brandenburg property, was considered that is located approximately 3,300 feet northeast of the project site, east of SR 87, south of the Union Pacific Railroad line, north of West St. James Street and west of Market Street. This 15.5-acre site is located partially in San Jose's Downtown Core Area and partially in the Downtown Frame Area.

A draft EIR was prepared for this alternative site that evaluated the impacts of developing 1.1 million square feet (sf) of office space, 12,000 sf of retail, and up to 650 residential units.[46] This is somewhat larger than the proposed project, but the impacts resulting from that development would be comparable to those resulting from the proposed project on this alternative site.

[46] City of San José, *West Julian Revitalization Project Draft Environmental Impact Report*, April 2001. This EIR was never certified, because the applicant withdrew the application for the development.

The Alternative site is comprised of a mix of existing industrial, warehouse, commercial and office uses. General Plan designations on the Alternative Site include *General Commercial, Residential Support for the Core Area*, and *Core Area Commercial*. The proposed project could be developed on the site under the existing General Plan designations. A Planned Development (PD) zoning would be required to develop the proposed uses on the Alternative Site.

Development of the project at the Alternative Site could avoid the project's two intersection impacts, including the project's impact at Bird Avenue and San Carlos Street. It is possible that development of the proposed uses at the alternative location would result in other intersection impacts, such as the intersection of Julian Street and SR 87. The larger project analyzed in the EIR for this alternative site resulted in a significant impact at this intersection. Project traffic at this location could also exceed interchange capacity at the SR 87 northbound off-ramp at Julian Street and the southbound loop on-ramp to SR 87, similar to the larger project analyzed in the EIR for this alternative site. There is no funding mechanism identified to complete improvements to the Julian Street/SR 87 Northbound off-ramp. Project development at the Alternative Site, therefore, could result in a significant unavoidable impact to this ramp.

The Alternative Site would not avoid the project's significant unavoidable impact upon five freeway segments, because the proposed development at this location would use the same freeway segments of SR87 and I-280. The Alternative Site would also not reduce or avoid the project's significant unavoidable impact upon regional air quality. This impact is not dependent upon the project site and would occur at any location.

The Alternative Site is not located within the ALUC 65 dBA CNEL boundary, but it is subject to high noise levels from aircraft, vehicle traffic on SR 87 and surface streets, and the Union Pacific railroad tracks that are at the north end of the site. Developing the proposed residential uses at this site would result in similar noise impacts related to high ambient noise levels (mitigated though measures included in the project). Multi-family residences are located about 120 feet from the Alternative site, so noise sensitive uses would be subject to construction noise.

The Alternative Site is located outside of the ALUC referral boundary, but is adjacent to the airport approach path for the Norman Y. Mineta San José International Airport. The Federal Aviation Administration determined that building heights of up to 180 feet above ground level would pose no safety hazard to aircraft. It is not known whether the proposed building heights of up to 264 feet above ground level would be allowed on the alternative site. Since the Alternative Site is twice the size of the project site, the reduced building height would not prohibit the proposed development size.

Building heights of up to 180 feet on the Alternative Site would result in significant shading impacts on future residential properties and on proposed public open space. A project shading itself is not considered a significant shading impact, so the project's significant unavoidable shading impact would be avoided through development at the Alternative Site.

The alternative site is located at the edge of the San Jose's downtown and on the east side if Highway 87, so the proposed 10 to 14-story high rise development on this alternative site would be more compatible with the existing scale of surrounding development.

Conclusion

The Alternative Site is not environmentally superior to the project, because it would not avoid the significant unavoidable regional air quality impacts that would result from the proposed project; and it would not avoid the project's significant unavoidable impacts on freeway segments. The Alternative Site would not meet project objectives of encouraging transit use through the development of high density uses at a location adjacent to existing and future transit stations. The Site Alternative would not encourage pedestrian traffic along the Guadalupe and Los Gatos Creeks by providing landscaped pathways along these creek corridors. The Alternative Site would be compatible with the economic goals of the City of San Jose and would improve the City's jobs/housing imbalance.

V. GROWTH-INDUCING IMPACTS OF THE PROPOSED ACTION

The site is currently developed with urban land uses and is designated for urban land use. The proposed project will cause an increase in employment potential and in increase in population. The project is anticipated to accommodate approximately 3,000 jobs and house 1,075 persons.[47] This increase, however, is not considered significant, particularly in light of the regional demand for housing. The project is consistent with the General Plan and is within the urban boundaries of the City of San José. Redevelopment of the site will not require any significant extension of utilities. The project is an infill location that is adjacent to existing and future transit. The project will not set any significant new precedent which might encourage excessive or unplanned growth outside of the existing Urban Service Area.

Based upon the above discussion, it is concluded that the project will not have significant growth inducing impacts.

[47] Per ABAG Projections 2000, the average household size in the City of San José for multi-family units is 3.31 persons per household (325 * 3.31 = 1,075 residents)

VI. SIGNIFICANT, UNAVOIDABLE IMPACTS OF THE PROJECT

If the project is implemented, it would result in the following significant unavoidable impacts:

- Significant unavoidable impacts to five I-280 and SR87 freeway segments
- Significant unavoidable regional ozone and PM_{10} air quality impacts
- Significant unavoidable temporary noise impacts during project construction
- Significant unmitigated shading impact on the Arena Green and Guadalupe River Park trail during the midday hours around the winter solstice from buildout of the maximum building envelope.

Additionally, the project will contribute towards the following significant unavoidable cumulative impacts:

- Significant unavoidable cumulative traffic impacts
- Significant unavoidable near-term cumulative air quality impacts
- Significant unavoidable cumulative construction noise impact
- Significant unavoidable cumulative traffic-related noise impacts.

All other significant impacts of the project would be mitigated to a less than significant level by the measures described in this EIR.

VII. EFFECTS FOUND NOT TO BE SIGNIFICANT

The following environmental issues were initially reviewed and found to be less than significant, generally because they do not apply to the project or project site.

Air Quality

The project does not propose any uses or operations that would generate toxic air contaminants (TOCs). Similarly, the project does not propose any uses that would generate objectionable odors. Therefore, the project would not result in any air quality impacts related to TOCs or odors.

Geology

The project will be connected to the City's sanitary sewer system; therefore, septic tanks and leach fields are not proposed. On-site soils will not need to support any alternative waste water disposal system.

Hydrology

The proposed project, consisting of retail and office commercial and residential uses, will not violate any water quality or waste discharge requirements. The project will not degrade or deplete groundwater resources.

The project will not alter the existing drainage pattern of the area or the course of either the Guadalupe River or Los Gatos Creek.

The project will not expose people or structures to a significant risk of loss, injury or death involving flooding as a result of the failure of a levee or dam, because the site is not within a dam inundation area. The project site is also not subject to inundation by seiche, tsunami, or mudflow.

Hazards

The project will not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The project will not expose people or structures to a significant risk or loss, injury, or death involving wild land fires, since the site is located in an urban area and is not subject to wild land fires.

Mineral Resources

The project proposes redevelopment of a developed site near downtown San Jose. The site is not in an area of known mineral resources. The project, therefore, will not result in the loss of availability of a known mineral resource that would be of value to the region; nor would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

Population and Housing

While the project proposes 325 units of residential development, the project will not induce substantial population growth. The site has been designated for residential uses and the population growth anticipated to result from the project is included in the City's growth projections. The project will not displace substantial numbers of existing housing; nor will it displace substantial numbers of people. The project will remove one house from the site, at 45 Delmas Avenue.

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